9-1095

ACCESS DB # 202512

FOR OFFICIAL USE ONLY

PLEASE PRINT CLEARLY

Scientific and Technical Information Center

SEARCH REQUEST FORM

Requester's Full Name: SABIHA QAZI Examiner # : 74141 Date: 9/21/06

Art Unit: 1616 Phone Number: 2-0622 Serial Number: 10/509,074

Location (Bldg/Room#): 4A45 (Mailbox #): 4C76 Results Format Preferred (circle): PAPER DISK

****

To ensure an efficient and quality search, please attach a copy of the cover sheet, claims, and abstract or fill out the following:

Title of Invention: Novel dithiopyrrolo with therapeutic use

Inventors (please provide full names): GENHUI CHEN et al

Earliest Priority Date: 3/26/2002

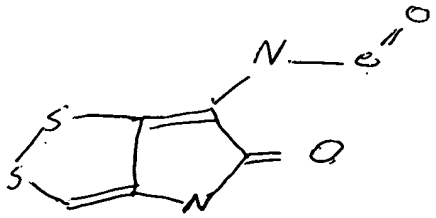
Search Topic:

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known.

For Sequence Searches Only ***Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.***

cls 1-10

Please search for the A compds of dithiopyrrolo formula



Thank you

copy of cls are attached

****

STAFF USE ONLY

Searcher: Mille

Searcher Phone #:

Searcher Location:

Date Searcher Picked Up: 9/27/06

Date Completed: 9/27/06

Searcher Prep & Review Time: 15

Online Time: 29

Type of Search

____ NA Sequence (#)

____ AA Sequence (#)

4 Structure (#)

✓ Bibliographic

____ Litigation

____ Fulltext

____ Other

Vendors and cost where applicable

✓

____ STN ____ Dialog

____ Questel/Orbit ____ Lexis/Nexis

____ Westlaw ____ WWW/Internet

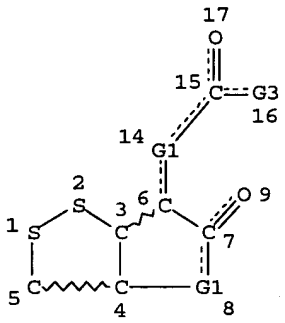
____ In-house sequence systems

____ Commercial ____ Oligomer ____ Score/Length

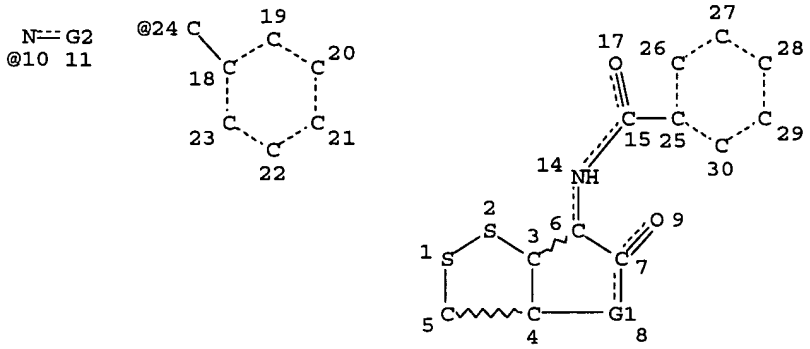
____ Interference ____ SPDI ____ Encode/Transl

____ Other (specify)

```
=> b reg
FILE 'REGISTRY' ENTERED AT 10:32:02 ON 27 SEP 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2006 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:   26 SEP 2006  HIGHEST RN 908803-03-2
DICTIONARY FILE UPDATES:  26 SEP 2006  HIGHEST RN 908803-03-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=> d que sta l16
L6                STR

 N---G2       Ak--Cy
@10 11       @12 13
```



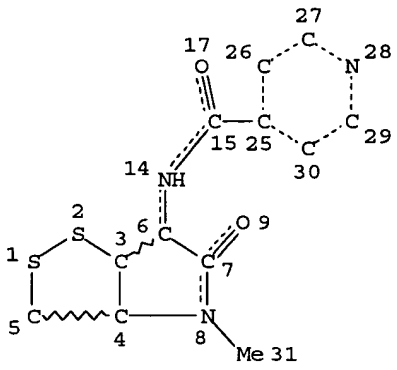

```
VAR G1=NH/10
VAR G2=AK/CY/12
VAR G3=AK/CY
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  17

STEREO ATTRIBUTES: NONE
L8           215 SEA FILE=REGISTRY SSS FUL L6
L10               STR
```



VAR G1=NH/10
VAR G2=ME/24
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 27

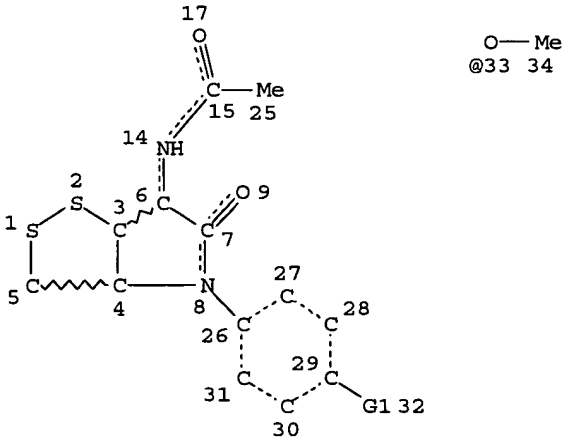
STEREO ATTRIBUTES: NONE
L11 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 19

STEREO ATTRIBUTES: NONE
L12 STR



VAR G1=33/ME/H
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 22

STEREO ATTRIBUTES: NONE
L15 3 SEA FILE=REGISTRY SUB=L8 CSS FUL (L10 OR L11 OR L12)
L16 212 SEA FILE=REGISTRY ABB=ON PLU=ON L8 NOT L15

=> b hcap
FILE 'HCAPLUS' ENTERED AT 10:32:14 ON 27 SEP 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1907 - 27 Sep 2006 VOL 145 ISS 14
FILE LAST UPDATED: 26 Sep 2006 (20060926/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate
substance identification.

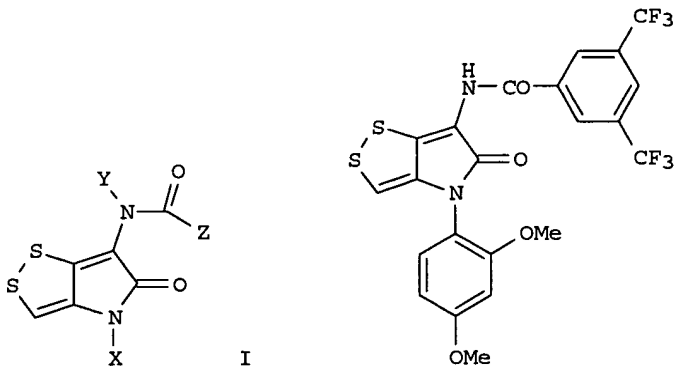
=> d bib abs hitrn fhitstr retable tot l28

L28 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2003:777806 HCAPLUS
DN 139:292253
TI Preparation of novel dithiolopyrrolones with therapeutic activity against
proliferative diseases

IN Chen, Genhui; Li, Bin; Li, Jianxiong;
Webster, John
PA Welichem Biotech Inc., Can.
SO PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	WO2003080624	A2	20031002	2003WO-CA00380	20030318	<--
	WO2003080624	A3	20040325			
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW					
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
	CA---2479341	AA	20031002	2003CA-2479341	20030318	<--
	AU2003209899	A1	20031008	2003AU-0209899	20030318	<--
	EP---1490374	A2	20041229	2003EP-0744744	20030318	<--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK					
	CN---1642959	A	20050720	2003CN-0806882	20030318	<--
	JP2005526803	T2	20050908	2003JP-0578378	20030318	<--
	US2006074125	A1	20060406	2005US-0509074	20051014	<--
PRAI	2002US-367265P	P	20020326	<--		
	2002US-418698P	P	20021017			
	2003WO-CA00380	W	20030318	<--		

OS MARPAT 139:292253
GI



AB The present invention provides novel dithiolopyrrolone compds. (I) [X and Y can be the same or different, are hydrogen, substituted or unsubstituted alkyl, cycloalkyl, aryl, aralkyl or heterocyclic group except the compds. with: Z = Ph, Y = H, X = H, Me or benzyl, and Z = 4-pyridine, X = Me, Y = H; or When X = aryl, heterocyclic, Y and Z, can be the same or different, are hydrogen, unsubstituted or substituted or alkyl of two or less hydroxy groups and no carboxylic acid group, cycloalkyl, aryl, aralkyl or heterocyclic group, except the compds. with: Z = Me, Y = H, X = Ph, 4-methoxyphenyl, 4-methylphenyl] and their salts, which are useful as treatments for cancer and other proliferative diseases. The present invention also provides therapeutic compns. comprising particularly useful types of dithiolopyrrolones, the salts thereof, and methods of using the

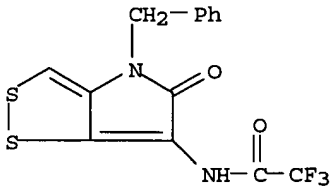
compds. within such types, particularly in treating proliferative diseases such as cancer. For example, 1,2-dithiolo[4,3-b]pyrrol-5(4H)-one derivative (II) in vitro showed IC50 of ≤0.01, 0.13, 0.016, 0.14, 0.014, 0.03, 0.04, 0.013, and 0.013 μM against leukemia CCRF-CEM, non-small cell lung cancer, colon cancer HCT-116, CNS cancer 0.14, melanoma LOXIMVI, ovarian cancer OVCAR-3, renal cancer RXF 393, prostate cancer DU-145, and breast cancer T-47D, resp.

IT **104902-48-9P 104902-62-7P 608131-31-3P**
608131-47-1P 608131-48-2P 608131-49-3P
608131-50-6P 608131-51-7P 608131-53-9P
608131-54-0P 608131-55-1P 608131-56-2P
608131-57-3P 608131-58-4P 608131-59-5P
608131-60-8P 608131-61-9P 608131-62-0P
608131-63-1P 608131-64-2P 608131-65-3P
608131-66-4P 608131-67-5P 608131-68-6P
608131-69-7P 608131-70-0P 608131-71-1P
608131-72-2P 608131-73-3P 608131-74-4P
608131-75-5P 608131-76-6P 608131-77-7P
608131-78-8P 608131-79-9P 608131-80-2P
608131-81-3P 608131-82-4P 608131-83-5P
608131-84-6P 608131-85-7P 608131-86-8P
608131-87-9P 608131-88-0P 608131-89-1P
608131-90-4P 608131-95-9P 608131-96-0P
608131-97-1P 608131-98-2P 608132-80-5P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of novel dithiolopyrrolones with therapeutic activity against proliferative diseases such as cancer)

IT **104902-48-9P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of novel dithiolopyrrolones with therapeutic activity against proliferative diseases such as cancer)

RN 104902-48-9 HCAPLUS

CN Acetamide, N-[4,5-dihydro-5-oxo-4-(phenylmethyl)-1,2-dithiolo[4,3-b]pyrrol-6-yl]-2,2,2-trifluoro- (9CI) (CA INDEX NAME)



L28 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2000:83116 HCAPLUS

DN 132:93329

TI Anticancer properties of 6-amino-5-oxo-1,2-dithiolo[4,3-b]pyrroles

IN **Webster, John M.; Li, Jianxiong; Chen, Genhui**

PA USA

SO U.S., 4 pp.
CODEN: USXXAM

DT Patent

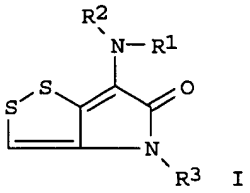
LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US---6020360	A	20000201	1996US-0716593	19960918
PRAI 1996US-0716593		19960918		

OS MARPAT 132:93329

GI



I

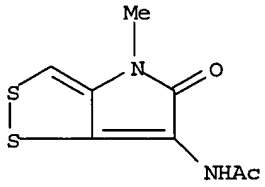
AB The title compds. [I; R1, R3 hydrogen, alkyl, cycloalkyl, aralkyl, aryl, heterocyclyl; R2 = hydrogen, (un)substituted alkyl, cycloalkyl, acyl, aryl, aralkyl, heterocyclyl] [e.g., N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)hexanoamide] are useful as in the treatment of cancers (i.e., colon cancer, cervical cancer, breast cancer, etc).

IT **87-11-6 92680-90-5 92680-92-7**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(anticancer properties of 6-amino-5-oxo-1,2-dithiolo[4,3-b]pyrroles)

IT **87-11-6**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(anticancer properties of 6-amino-5-oxo-1,2-dithiolo[4,3-b]pyrroles)

RN 87-11-6 HCAPLUS

CN Acetamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)-(8CI, 9CI) (CA INDEX NAME)



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Arnold, J	1995	55	537	Cancer Research	HCAPLUS
Celmer, W	1955	77	2861	J Amer Chem Soc	HCAPLUS
Eisenman, W	1953	3	385	Antibiotics and Chem	HCAPLUS
Forst, S	1996	60	21	Microbiol Rev	HCAPLUS
Hagio, K	1974	47	1484	Bull Chem Soc Japan	HCAPLUS
Jimenez, A	1973		729	Antimicrob Ag Chemot	HCAPLUS
Li, J	1995	58	1081	J Nat Prod	HCAPLUS
Mehta	1991	11	593	Anticancer Res	HCAPLUS
Menta, R	1991	11	593	Anticancer Research	
Moinerney, B	1991	54	774	J Nat Prod	
Ninomiya, Y	1980	28	3157	Chem Pharm Bull	HCAPLUS
Sharma, S	1994	54	5848	Cancer Research	HCAPLUS
Skehan, P	1990	82	1107	J Natl Cancer Inst	HCAPLUS
Stachel, H	1992		473	Liebigs Ann Chem, (A	HCAPLUS
Tipper, D	1973	116	245	J Bacteriol	HCAPLUS
Umezawa, H	1948	1	512	Jap Med J	HCAPLUS
Von Daehne, W	1969	22	233	J Antibiotics	HCAPLUS

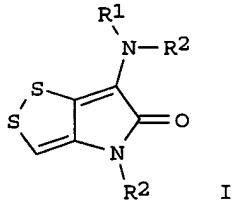
L28 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1999:193997 HCAPLUS

DN 130:232473
TI Dithiolopyrrolones and their corresponding monoxides and dioxides as antineoplastic agents from Xenorhabdus bovienii
IN **Webster, John Malcolm; Li, Jianxiong; Chen, Genhui**
PA Can.
SO PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO---9912543	A1	19990318	1998WO-CA00841	19980903
	W: AU, BG, BR, CH, CN, CZ, DE, ES, GB, HR, HU, ID, IL, JP, KP, KR, LU, MX, NO, NZ, PL, PT, RU, SE, SG, TR, UA, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA---2212237	AA	19990305	1997CA-2212237	19970905
	AU---9890570	A1	19990329	1998AU-0090570	19980903
	AU----759990	B2	20030501		
	EP---1009401	A1	20000621	1998EP-0942414	19980903
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP2001515861	T2	20010925	2000JP-0510440	19980903
	US---6583171	B1	20030624	2000US-0519871	20000306
	CN---1360891	A	20020731	2001CN-0131401	20010906
PRAI	1997CA-2212237	A	19970905		
	1996US-0627589	B1	19960404		
	1997US-0921851	B1	19970902		
	1998WO-CA00841	W	19980903		

OS MARPAT 130:232473
GI



I

AB Compds. I [R1 = H, (un)substituted alkyl, cycloalkyl, aryl, aralkyl, heterocyclyl; R2 = H, (un)substituted alkyl, cycloalkyl, aryl, aralkyl, heterocyclyl; R3 = H, alkyl, cycloalkyl, aralkyl, aryl, heterocyclyl group; or either of the S may have O or O2 attached], isolated from the bacteria Xenorhabdus bovienii, or the salts thereof, have antineoplastic activity. The invention provides pharmaceutical compns. containing the compds. and the methods for employing them as medicaments, particularly in the treatment of human and animal cancers. Xenorxides 1 and 2 and xenomins 1 and 2 were prepared from X. bovienii fermentation and purified. All the compds. exhibited very strong anticancer activity against cancer cells.

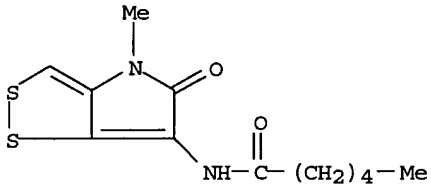
IT **92680-92-7 92680-93-8**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(dithiolopyrrolones and their corresponding monoxides and dioxides as

antineoplastic agents from Xenorhabdus bovienii)

IT **87-11-6**, Thiolutin
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(dithiolopyrrolones and their corresponding monoxides and dioxides as antineoplastic agents from Xenorhabdus bovienii)

IT **92680-92-7**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(dithiolopyrrolones and their corresponding monoxides and dioxides as antineoplastic agents from Xenorhabdus bovienii)

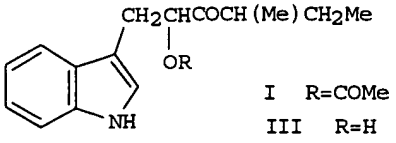
RN 92680-92-7 HCAPLUS
CN Hexanamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)-(9CI) (CA INDEX NAME)



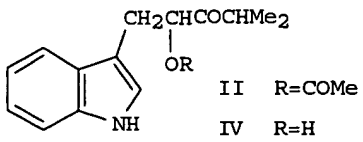
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Biotech Australia Pty L	1984			WO---8401775 A	HCAPLUS
Malcolm, W	1996			WO---9632396 A	HCAPLUS
Sharma, S	1994	54	5848	CANCER RESEARCH	HCAPLUS

L28 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1995:773532 HCAPLUS
DN 123:193172
TI Antimicrobial metabolites from a bacterial symbiont
AU **Li, Jianxiong; Chen, Genhui; Webster, John M.**
; Czyzewska, Eva
CS Dep. Biol. Sciences, Simon Fraser Univ., Burnaby, Vancouver, BC, V5A 1S6, Can.
SO Journal of Natural Products (1995), 58(7), 1081-6
CODEN: JNPRDF; ISSN: 0163-3864
PB American Society of Pharmacognosy
DT Journal
LA English
GI



I R=COMe
III R=H



II R=COMe
IV R=H

AB Two types of antibiotics, namely, indoles and dithiolopyrrolones, have been isolated and identified from Xenorhabdus bovienii A2. Compds. I and II showed strong activity against Cryptococcus neoformans, compds. III and IV showed strong activity against Botrytis cinerea, and compds. I, III, and IV showed significant activity against Phytophthora infestans (II was not tested). In addition, two lower homologues of xenorhabdins, namely,

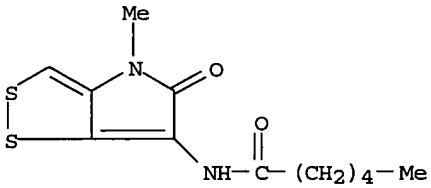
6-(N-3'-methylbutanamido)-4,5-dihydro-1,2-dithiolo[4,3-b]pyrrol-5-one and 6-(N-butanamido)4,5-dihydro-1,2-dithiolo[4,3-b]pyrrol-5-one, have been isolated and characterized for the first time.

IT **92680-92-7P 92680-93-8P 112843-01-3P 167559-98-0P**
RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)
(antimicrobial metabolites from a bacterial symbiont)

IT **92680-92-7P**
RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)
(antimicrobial metabolites from a bacterial symbiont)

RN 92680-92-7 HCAPLUS

CN Hexanamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)-(9CI) (CA INDEX NAME)



=> d bib abs hitstr retable tot l39

L39 ANSWER 1 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN

AN **2003:69873** HCAPLUS

DN 138:401704

TI Fused 1,2-dithioles, part VI. Synthesis and reactions of new dithiolopyrroles

AU Stachel, Hans-Dietrich; Eckl, Eduard; Immerz-Winkler, Elisabeth; Kreiner, Christine; Weigand, Wolfgang; Robl, Christian; Wunsch, Ralf; Dick, Stefan; Drescher, Norbert

CS Department Pharmazie/Zentrum fur Pharmaforschung, Universitat Munchen, Munchen, D-81377, Germany

SO Helvetica Chimica Acta (**2002**), 85(12), 4453-4467
CODEN: HCACAV; ISSN: 0018-019X

PB Verlag Helvetica Chimica Acta

DT Journal

LA English

OS CASREACT 138:401704

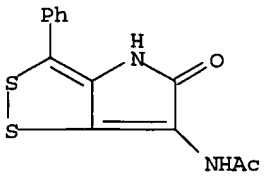
AB The title compds. were prepared starting from pyrrolinone. Nucleophilic-displacement and ring-closure reactions yielded the dithiolopyrrole (I), which formed salts with electrophiles as well as with bases. The crystal structure of I was determined Oxidation of the dithioles I and other related compound led to S(2)-oxides, thiosulfinate (II) and other related compound, and the corresponding S(2)-dioxides (III) and another oxide compound II was converted by a ring-opening/ring-closure reaction sequence to the bicyclic sulfinamide. The oxidative addition reactions of [Pt(η2-C2H4)(PPh3)2] (IV) with the disulfides led to the corresponding dithiolatoplatinum(II) complexes. The structure of one of these complexes was characterized. The sulfenato-thiolato complex was synthesized via reaction of IV with II. The thiosulfonato PtII complex (V) was prepared by an oxidative insertion of Pt0 into the C-S bond of the corresponding thiosulfonate III. Furthermore, V was characterized by single-crystal X-ray-diffraction studies.

IT **528881-05-2P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of dithiolopyrroles via nucleophilic-displacement and ring-closure reactions and their oxidative addition with bis(triphenylphosphine)(ethylene)platinum)

RN 528881-05-2 HCAPLUS

CN Acetamide, N-(4,5-dihydro-5-oxo-3-phenyl-1,2-dithiolo[4,3-b]pyrrol-6-yl)-(9CI) (CA INDEX NAME)

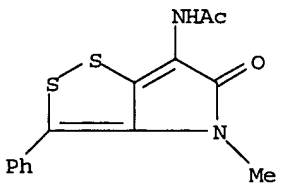


IT **528881-12-1P**

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of dithiolopyrroles via nucleophilic-displacement and ring-closure reactions and their oxidative addition with bis(triphenylphosphine)(ethylene)platinum)

RN 528881-12-1 HCAPLUS

CN Acetamide, N-(4,5-dihydro-4-methyl-5-oxo-3-phenyl-1,2-dithiolo[4,3-b]pyrrol-6-yl)- (9CI) (CA INDEX NAME)



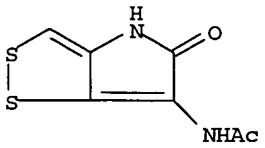
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Barrilier, D	1980	8	79	Phosphorus Sulfur Re	
Block, E	1973	95	5046	J Am Chem Soc	HCAPLUS
Bock, H	1994	91	53	Phosphorus, Sulfur S	HCAPLUS
Boyd, G	1965	6	1421	Tetrahedron Lett	
Celmer, W	1955	77	2861	J Am Chem Soc	HCAPLUS
Effenberger, F	1993	105	742	Angew Chem	HCAPLUS
El-Khateeb, M	2000	612	14	J Organomet Chem	HCAPLUS
El-Khateeb, M	2001	622	293	J Organomet Chem	HCAPLUS
Ettlinger, L	1959	42	563	Helv Chim Acta	HCAPLUS
Folkin, P	1991	113	8998	J Am Chem Soc	
Folkin, P	1993	115	3066	J Am Chem Soc	
Freeman, F	1984	84	117	Chem Rev	HCAPLUS
Gompper, R	1960	93	187	Chem Ber	HCAPLUS
Gompper, R	1960	93	198	Chem Ber	HCAPLUS
Hafner, K	1985	26	189	Tetrahedron Lett	HCAPLUS
Hamilton, S	1984				HCAPLUS
Hartke, K	1974	107	739	Chem Ber	HCAPLUS
Hernandez, M	2001	20	4061	Organometallics	HCAPLUS
Hotoda, H	2001			WO2001014399	HCAPLUS
Immerz-Winkler, E	1981			Ph D thesis, Univers	
Kice, J	1973	95	109	J Am Chem Soc	HCAPLUS
Mayer, R	1957	69	481	Angew Chem	HCAPLUS
Nagel, U	1982	115	1998	Chem Ber	HCAPLUS
Oae, S	1980	21	3213	Tetrahedron Lett	HCAPLUS

Oae, S	1985		1	` Organic Sulfur Che	HCAPLUS
Page, P	1992	48	5933	Tetrahedron	HCAPLUS
Page, P	1988	29	4477	Tetrahedron Lett	HCAPLUS
Perrone, E	1986	51	3413	J Org Chem	HCAPLUS
Rakitin, O	1996	61	9178	J Org Chem	HCAPLUS
Reichardt, C	1979	18	98	Angew Chem, Int Ed	
Reichardt, C	1988			` Solvents and Solve	
Savage, W	1964	5	3289	Tetrahedron Lett	
Schachtner, J	1999	36	161	J Heterocycl Chem	HCAPLUS
Schachtner, J	1999	54	335	Pharmazie	HCAPLUS
Shaver, A	1996	35	6356	Inorg Chem	HCAPLUS
Shaver, A	1991	113	7780	J Am Chem Soc	HCAPLUS
Shiozawa, H	1997	50	449	J Antibiot	HCAPLUS
Stachel, H	1985	318	311	Arch Pharm (Weinheim	HCAPLUS
Stachel, H	1997	62	510	Collect Czech, Chem	HCAPLUS
Stachel, H	1992		473	Liebigs Ann Chem	HCAPLUS
Timpe, H	1983	33	185	` Advances in Hetero	HCAPLUS
Webster, J	1998			US---5827872	HCAPLUS
Webster, J	2000			US---6020360	HCAPLUS
Weigand, W	1992	125	1047	Chem Ber	HCAPLUS
Weigand, W	1996	129	1409	Chem Ber	HCAPLUS
Weigand, W	1994	49	513	Z Naturforsch, B	HCAPLUS
Wunsch, R	2001	621	352	J Organomet Chem	HCAPLUS
Wunsch, R	1995			Ph D thesis, Univ Mu	

L39 ANSWER 2 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
AN **2002:897441** HCAPLUS
DN 138:253753
TI Mutants of Streptomyces clavuligerus with disruptions in different genes for clavulanic acid biosynthesis produce large amounts of holomycin: possible cross-regulation of two unrelated secondary metabolic pathways
AU De la Fuente, Alvaro; Lorenzana, Luis M.; Martin, Juan F.; Liras, Paloma
CS Area de Microbiologia, Facultad de Ciencias Biologicas y Ambientales, Universidad de Leon, Leon, 24071, Spain
SO Journal of Bacteriology (**2002**), 184(23), 6559-6565
CODEN: JOBAAY; ISSN: 0021-9193
PB American Society for Microbiology
DT Journal
LA English
AB A Streptomyces clavuligerus ccaR::aph strain, which has a disruption in the regulatory gene ccaR, does not produce cephamycin C or clavulanic acid, but does produce a bioactive compound that was identified as holomycin by high-performance liquid chromatog. (HPLC) and IR and mass spectrometry. S. clavuligerus strains with disruptions in different genes of the clavulanic acid pathway fall into three groups with respect to holomycin biosynthesis. (i) Mutants with mutations in the early steps of the pathway blocked in the gene ceaS (pyc) (encoding carboxyethylarginine synthase), bls (encoding a β-lactam synthetase), or open reading frame 6 (ORF6; coding for an acetyltransferase of unknown function) are holomycin nonproducers. (ii) Mutants blocked in the regulatory gene ccaR or claR or blocked in the last gene of the pathway encoding clavulanic acid reductase (car) produce holomycin at higher levels than the wild-type strain. (iii) Mutants with disruption in cyp (coding for cytochrome P 450), ORF12, and ORF15, genes that appear to be involved in the conversion of clavaminic acid into clavaldehyde or in secretion steps, produce up to 250-fold as much holomycin as the wild-type strain. An assay for holomycin synthetase was developed. This enzyme forms holomycin from holothin by using acetyl CoA as an acetyl group donor. The holomycin synthase activities in the different clavulanic acid mutants correlate well with their production of holomycin.
IT **488-04-0P**, Holomycin
RL: BPN (Biosynthetic preparation); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); PREP (Preparation)
(holomycin biosynthesis by Streptomyces clavuligerus mutants)
RN 488-04-0 HCAPLUS
CN Acetamide, N-(4,5-dihydro-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)- (8CI,

9CI) (CA INDEX NAME)



RETABLE

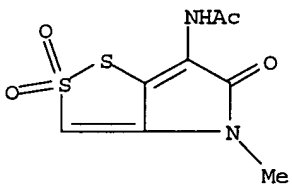
Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Alexander, D	2000	182	348	J Bacteriol	HCAPLUS
Bachmann, B	1998	95	9082	Proc Natl Acad Sci U	HCAPLUS
Baggaley, K	1997	140	309	Nat Prod Rep	
Bentley, S	2002	417	141	Nature	
Bird, A	1982	107	1241	Analyst	HCAPLUS
Chary, V	1997	63	2977	Appl Environ Microbi	HCAPLUS
de la Fuente, A	2002			PhD thesis, Universi	
Ellis, J	1977	42	2891	J Org Chem	HCAPLUS
Gaeumann, E	1961			US-3.014.922	HCAPLUS
Kenig, M	1979	32	549	J Antibiot	HCAPLUS
Kershaw, N	2002	269	2052	Eur J Biochem	HCAPLUS
Khaleeli, N	1999	121	9223	J Am Chem Soc	HCAPLUS
Kieser, T	2000			Practical Streptomyc	
Li, R	2000	182	4087	J Bacteriol	HCAPLUS
Liras, P	2000	54	467	Appl Microbiol Biote	HCAPLUS
Lorenzana, L	2002			PhD thesis, Universi	
Mellado, E	2002	148	1427	Microbiology	HCAPLUS
Mosher, R	1999	43	1215	Antimicrob Agents Ch	HCAPLUS
Nicholson, N	1994	1994	1281	J Chem Soc Chem Comm	
Okamura, K	1977	30	334	J Antibiot	HCAPLUS
Okanishi, M	1979		134	Genetics of industri	HCAPLUS
Omura, S	2001	98	12215	Proc Natl Acad Sci U	HCAPLUS
Paradkar, A	1995	177	1307	J Bacteriol	HCAPLUS
Paradkar, A	1998	27	831	Mol Microbiol	HCAPLUS
Perez-Llarena, F	1997	179	2053	J Bacteriol	HCAPLUS
Perez-Redondo, R	1998	211	311	Gene	HCAPLUS
Perez-Redondo, R	1999	181	6922	J Bacteriol	HCAPLUS
Rodriguez-Garcia, A	2000	2	543	Mol Microbiol Biotec	HCAPLUS
Romero, J	1986	52	892	Appl Environ Microbi	HCAPLUS
Romero, J	1984	20	318	Appl Microbiol Biote	HCAPLUS
Sambrook, J	1989			Molecular cloning: a	
Santamarta, I	2002	184	3106	J Bacteriol	HCAPLUS
Webster, J	2000			US---6020360	HCAPLUS

L39 ANSWER 3 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2002:693119 HCAPLUS
DN 137:222003
TI Use of thiolutin dioxide and its derivatives for the treatment of CNS disorders and a process for the preparation thereof
IN Eder, Claudia; Kurz, Michael; Wink, Joachim
PA Aventis Pharma Deutschland GmbH, Germany
SO Eur. Pat. Appl., 11 pp.
CODEN: EPXXDW
DT **Patent**
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP---1238668	A1	20020911	2001EP-0105959	20010309 <--

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

```
     CA---2439853          AA    20020919    2002CA-2439853          20020223 <--
     WO2002072089          A2    20020919    2002WO-EP01915          20020223 <--
     WO2002072089          A3    20021114
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, UZ, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     EE-200300430          A     20031215    2003EE-0000430          20020223 <--
     EP---1372640          A2    20040102    2002EP-0719902          20020223 <--
     EP---1372640          B1    20060719
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     CN---1501800          A     20040602    2002CN-0807949          20020223 <--
     JP2004521927          T2    20040722    2002JP-0571048          20020223 <--
     BR2002007884          A     20040727    2002BR-0007884          20020223 <--
     NZ----528071          A     20050225    2002NZ-0528071          20020223 <--
     AT----333276          E     20060815    2002AT-0719902          20020223 <--
     US2002193418          A1    20021219    2002US-0092882          20020308 <--
     ZA2003006474          A     20040429    2003ZA-0006474          20030820 <--
     NO2003003964          A     20030908    2003NO-0003964          20030908 <--
     BG----108161          A     20040930    2003BG-0108161          20030908 <--
     US2005059725          A1    20050317    2004US-0973309          20041026 <--
PRAI 2001EP-0105959        A     20010309  <--
     2002WO-EP01915        W     20020223  <--
     2002US-0092882        A1    20020308  <--
OS   MARPAT 137:222003
AB   The present invention relates to the use of thiolutin dioxide (I) and its
     derivs. in the manufacture of a medicament for the treatment of CNS disorders,
     to a process for the production thereof by fermentation of the microorganism
     Nocardiopsis species ST 100692, DSM 13834 , and to the micro-organism
     Nocardiopsis species ST 100692, DSM 13834.  Above microorganisms were
     cultured to obtain I.  The IC 50 of I as neurolysin inhibitor was 0.6 M.
IT   224171-21-5
     RL: FMU (Formation, unclassified); NPO (Natural product occurrence); PAC
     (Pharmacological activity); THU (Therapeutic use); BIOL (Biological
     study); FORM (Formation, nonpreparative); OCCU (Occurrence); USES (Uses)
        (use of thiolutin dioxide and its derivs. for treatment of CNS
        disorders and process for preparation thereof)
RN   224171-21-5  HCAPLUS
CN   Acetamide, N-(4,5-dihydro-4-methyl-2,2-dioxido-5-oxo-1,2-dithiolo[4,3-
     b]pyrrol-6-yl)- (9CI)  (CA INDEX NAME)
```

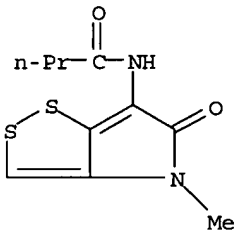


RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Chen, G	1999			WO---9912543 A	HCAPLUS
Malcolm, W	1996			WO---9632396 A	HCAPLUS

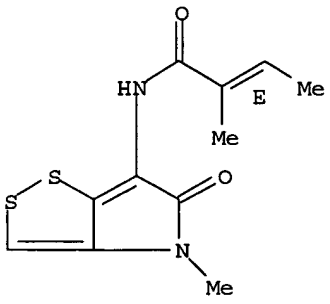
```
L39  ANSWER 4 OF 24  HCAPLUS  COPYRIGHT 2006 ACS on STN
AN   2002:674513  HCAPLUS
```

DN 138:88690
TI New dithiolopyrrolone antibiotics from Saccharothrix sp. SA 233. II. Physicochemical properties and structure elucidation
AU Lamari, Lynda; Zitouni, Abdelghani; Dob, Tahar; Sabaou, Nasserdine; Lebrihi, Ahmed; Germain, Pierre; Seguin, Elisabeth; Tillequin, Francois
CS Laboratoire de Recherche sur les produits Bioactifs et la Valorisation de la Biomasse, Ecole Normale Superieure de Kouba, Algiers, 16 050, Algeria
SO Journal of Antibiotics (2002), 55(8), 702-706
CODEN: JANTAJ; ISSN: 0021-8820
PB Japan Antibiotics Research Association
DT Journal
LA English
AB Three new natural dithiopyrrolone antibiotics, 3-methyl-2-butenoylpyrrothine (1), tigloylpyrrothine (2), and n-butyropyrrothine (3) were isolated along with the known iso-butyropyrrothine (4) and thiolutin (5) from the fermentation broth of Saccharothrix sp. SA 233. The structures of the novel compds. were established on the basis on their spectral data.
IT **112843-01-3P 482656-55-3P**
RL: BSU (Biological study, unclassified); NPO (Natural product occurrence); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)
(dithiolopyrrolone antibiotics from Saccharothrix fermentation)
RN 112843-01-3 HCAPLUS
CN Butanamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)-(9CI) (CA INDEX NAME)

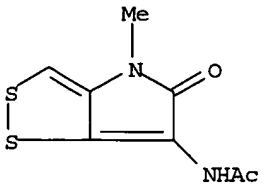


RN 482656-55-3 HCAPLUS
CN 2-Butenamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)-2-methyl-, (2E)- (9CI) (CA INDEX NAME)

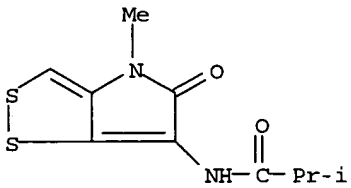
Double bond geometry as shown.



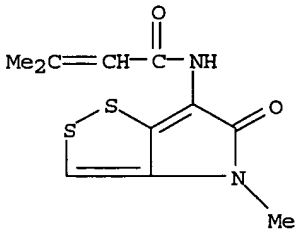
IT **87-11-6P**, Thiolutin **39859-18-2P**
RL: BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); PREP (Preparation)
(dithiolopyrrolone antibiotics from Saccharothrix fermentation)
RN 87-11-6 HCAPLUS
CN Acetamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)-(8CI, 9CI) (CA INDEX NAME)



RN 39859-18-2 HCAPLUS
CN Propanamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)-2-methyl- (9CI) (CA INDEX NAME)



IT **482656-54-2P**
RL: BSU (Biological study, unclassified); NPO (Natural product occurrence); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)
(of dithiolopyrrolone antibiotics from Saccharothrix fermentation)
RN 482656-54-2 HCAPLUS
CN 2-Butenamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)-3-methyl- (9CI) (CA INDEX NAME)



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Bhate, D	1960	16	504	Experimentia	HCAPLUS
Celmer, W	1953-	1953-	622	Antibiotics Annual	
Celmer, W	1952	74	6304	J Am Chem Soc	HCAPLUS
Celmer, W	1955	77	2861	J Am Chem Soc	HCAPLUS
Dell, I	1992		384	A C S Symposium Seri	HCAPLUS
Ettlinger, L	1959	42	563	Helv Chim Acta	HCAPLUS
Hacene, H	1994	79	81	Microbios	HCAPLUS
Lamari, L	2002	55	696	J Antibiotics	HCAPLUS
McIverney, B	1991	54	774	J Nat Prod	
Sabaou, N	1992	38	357	Can J Microbiol	
Von Daehne, W	1969	22	233	J Antibiotics	HCAPLUS

L39 ANSWER 5 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
AN **2002:674510** HCAPLUS
DN 138:86345
TI New dithiolopyrrolone antibiotics from Saccharothrix sp. SA 233. I. Taxonomy, fermentation, isolation and biological activities

AU Lamari, Lynda; Zitouni, Abdelghani; Boudjella, Hadjira; Badji, Boubekeur; Sabaou, Nasserdine; Lebrihi, Ahmed; Lefebvre, Gerard; Seguin, Elisabeth; Tillequin, Francois

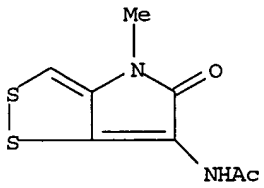
CS Laboratoire de Recherche sur les Produits Bioactifs et la Valorisation de la Biomasse, Ecole Normale Superieure de Kouba, Algiers, 16 050, Algeria

SO Journal of Antibiotics (2002), 55(8), 696-701
CODEN: JANTAJ; ISSN: 0021-8820
PB Japan Antibiotics Research Association
DT Journal
LA English

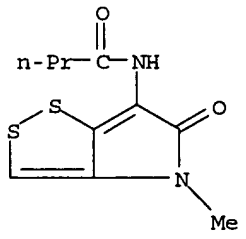
AB Three new natural antibacterial and antifungal dithiolopyrrolone antibiotics were isolated along with the known iso-butyropyrrothine and thiolutine from the fermentation broth of an actinomycete strain which was isolated from a saharian palm grove soil collected at Adrar, south Algeria. The strain was identified as Saccharothrix sp. The three new antibiotics exhibited broad antimicrobial activity against Gram-pos. bacteria, yeasts and fungi in vitro.

IT **87-11-6P**, Thiolutin **112843-01-3P 482656-54-2P 482656-55-3P**
RL: BSU (Biological study, unclassified); NPO (Natural product occurrence); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)
(antibacterial and antifungal activity of dithiolopyrrolone antibiotics from Saccharothrix fermentation)

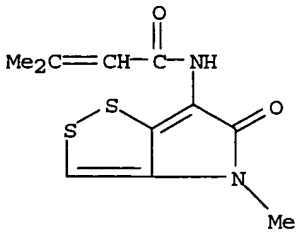
RN 87-11-6 HCAPLUS
CN Acetamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)- (8CI, 9CI) (CA INDEX NAME)



RN 112843-01-3 HCAPLUS
CN Butanamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)- (9CI) (CA INDEX NAME)

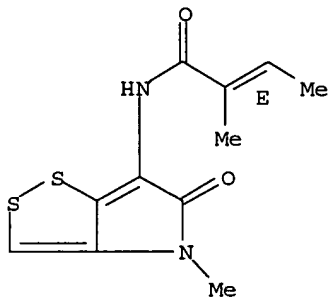


RN 482656-54-2 HCAPLUS
CN 2-Butenamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)-3-methyl- (9CI) (CA INDEX NAME)

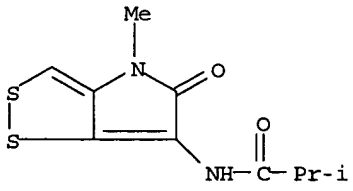


RN 482656-55-3 HCAPLUS
CN 2-Butenamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)-2-methyl-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



IT **39859-18-2P**
RL: BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); PREP (Preparation)
(antibacterial and antifungal activity of dithiolopyrrolone antibiotics from Saccharothrix fermentation)
RN 39859-18-2 HCAPLUS
CN Propanamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)-2-methyl- (9CI) (CA INDEX NAME)

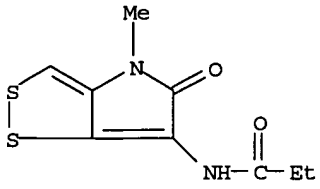


RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Becker, B	1964	12	421	Appl Microbiol	MEDLINE
Bhate, D	1960	16	504	Experimentia	HCAPLUS
Furumai, T	1982	35	1367	J Antibiotics	HCAPLUS
Goodfellow, M	1971	69	33	J Gen Microbiol	MEDLINE
Hacene, H	1994	79	81	Microbios	HCAPLUS
Hayakawa, M	1984	65	501	J Ferment Technol	
Kroppenstedt, R	1992		1139	The Procaryotes	
Labeda, D	1984	34	426	Int J Syst Bacteriol	
Lamari, L	2002	55	702	J Antibiotics	HCAPLUS
Lechevalier, M	1970		311	The Actinomycetales	
Minnikin, D	1977	27	104	Int J Syst Bacteriol	HCAPLUS

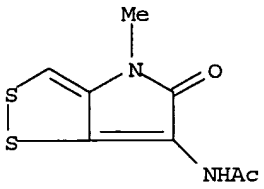
Minnikin, D	1980	188	221	J Chromatography	HCAPLUS
Sabaou, N	1992	38	357	Can J Microbiol	
Shirling, E	1966	16	313	Int J Syst Bacteriol	
Waksman, S	1961	II		The Actinomycetes	
Yamagishi, S	1971	91	351	Yakugaku Zasshi	HCAPLUS

L39 ANSWER 6 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
AN **2001:529323** HCAPLUS
DN 136:256811
TI Thiolutin, an inhibitor of HUVEC adhesion to vitronectin, reduces paxillin in HUVECS and suppresses tumor cell-induced angiogenesis
AU Minamiguchi, Kazuhisa; Kumagai, Hiroyuki; Masuda, Tohru; Kawada, Manabu; Ishizuka, Masaaki; Takeuchi, Tomio
CS Institute for Chemotherapy, M.C.R.F., Shizuoka, 410-0301, Japan
SO International Journal of Cancer (2001), 93(3), 307-316
CODEN: IJCNAW; ISSN: 0020-7136
PB Wiley-Liss, Inc.
DT Journal
LA English
AB Recent studies have shown that integrin αvβ3, a receptor for vitronectin, plays an important role in tumor-induced angiogenesis and tumor growth and that antagonists of αvβ3 inhibit angiogenic processes including endothelial cell adhesion and migration. On the other hand, most inhibitors of integrin αvβ3 are peptide antagonists that include the Arg-Gly-Asp (RGD) motif. We therefore reasoned that non-peptide inhibitors of endothelial cell adhesion to vitronectin might be useful for inhibition of tumor angiogenesis in vivo. We screened for low-mol.-weight natural products able to inhibit adhesion of human umbilical vein endothelial cells (HUVECs) to vitronectin, and pyrrothine group compds. including aureothricin, thioaurin and thiolutin were isolated from microbial culture broths. Of these compds., thiolutin inhibited adhesion of HUVECs to vitronectin the most effectively (IC50, 0.83 μM). In vivo expts. showed that thiolutin significantly suppressed angiogenesis induced by tumor cells (S-180), a pathol. form of neovascularization, in a mouse dorsal air sac assay system. To explore the mechanism of inhibition of HUVEC adhesion to vitronectin by thiolutin, we examined the effect of this agent on intracellular cell adhesion signaling. We found that the amount of paxillin in HUVECs was significantly reduced by thiolutin treatment, while those of other focal adhesion proteins including vinculin and focal adhesion kinase (FAK) were not. Metabolic labeling expts. showed that thiolutin enhanced degradation of paxillin in HUVECs. Protease inhibitors (MGI 15 and E64 Da) decreased the rate of degradation of the paxillin induced by thiolutin and partially restored thiolutin-induced inhibition of HUVEC adhesion to vitronectin. Based on these findings, we concluded that thiolutin, an inhibitor of HUVEC adhesion to vitronectin, reduces the paxillin level in HUVECs and suppresses tumor cell-induced angiogenesis in vivo.
IT **574-95-8**, Aureothricin
RL: PAC (Pharmacological activity); BIOL (Biological study)
(thiolutin, an inhibitor of HUVEC adhesion to vitronectin, reduces paxillin in HUVECS and suppresses tumor cell-induced angiogenesis)
RN 574-95-8 HCAPLUS
CN Propanamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)- (9CI) (CA INDEX NAME)



IT **87-11-6**, Thiolutin

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(thiolutin, an inhibitor of HUVEC adhesion to vitronectin, reduces paxillin in HUVECS and suppresses tumor cell-induced angiogenesis)
RN 87-11-6 HCAPLUS
CN Acetamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)-(8CI, 9CI) (CA INDEX NAME)

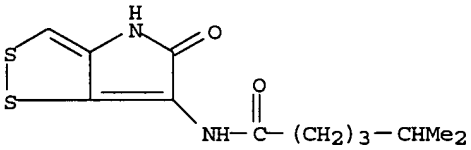


RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Auerbach, W	1994	63	265	Pharmacol Ther	HCAPLUS
Bhattacharya, S	1996	270	16781	J Biol Chem	
Blood, C	1990	1032	89	Biochim Biophys Acta	HCAPLUS
Brooks, P	1994	79	1157	Cell	HCAPLUS
Brooks, P	1995	96	1815	J Clin Invest	HCAPLUS
Brooks, P	1994	264	569	Science	HCAPLUS
Celmer, W	1955	77	2861	J Am Chem Soc	HCAPLUS
Cheresh, D	1991	10	3	Cancer Metastasis Re	HCAPLUS
Clark, E	1995	268	233	Science	HCAPLUS
Downs, E	1992	152	422	J Cell Physiol	HCAPLUS
D'Amore, P	1992	3	49	Semin Cancer Biol	MEDLINE
Folkman, J	1987	235	442	Science	HCAPLUS
Folkman, J	1992	3	89	Semin Cancer Biol	MEDLINE
Friedlander, M	1995	270	1500	Science	HCAPLUS
Hynes, R	1992	69	11	Cell	HCAPLUS
Jain, R	1997	3	1203	Nature (Lond)	HCAPLUS
Kawada, M	1999	1452	209	Biochim Biophys Acta	HCAPLUS
Laemmli, U	1970	224	680	Nature	
Majewski, S	1994	57	81	Int J Cancer	HCAPLUS
Miyamoto, S	1995	131	791	J Cell Biol	HCAPLUS
Mori, S	1995	270	29447	J Biol Chem	HCAPLUS
Nauyen, M	1994	47	31	Microvasc Res	
Oikawa, T	1997	17	1881	Anticancer Res	HCAPLUS
Ono, M	1996	56	1512	Cancer Res	HCAPLUS
Ruess, C	1998	4	408	Nature Med	
Schwartz, M	1995	11	549	Annu Rev Cell Dev Bi	HCAPLUS
Sidky, Y	1997	47	5155	Cancer Res	
Staiano, N	1997	73	298	Eur J Cell Biol	HCAPLUS
Sunderkotter, C	1994	55	410	J Leukoc Biol	MEDLINE
Tamai, M	1987	35	1098	Chem Pharm Bull (Tok	HCAPLUS
Thomas, S	1997	13	513	Annu Rev Cell Dev Bi	HCAPLUS
Thompson, J	1988	241	1349	Science	HCAPLUS
Tipper, D	1973	116	245	J Bacteriol	HCAPLUS
Tong, X	1997	94	4412	Proc Natl Acad Sci U	HCAPLUS
Ueno, M	1993	46	719	J Antibiot (Tokyo)	HCAPLUS
Yamaguchi, R	1997	15	1753	Oncogene	HCAPLUS

L39 ANSWER 7 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
AN **2001:371150** HCAPLUS
DN 135:119325
TI Unusual cytotoxic phenethylamides from Xenorhabdus nematophilus
AU Paik, Seunguk; Park, Young Hwan; Suh, Seong Il; Kim, Hyun Su; Lee, In Sun; Park, Myung Kwang; Lee, Chun Soo; Park, Sun Ho
CS Faculty of Chemical & Materials Engineering, Keimyung University, Taegu,

704-701, S. Korea
SO Bulletin of the Korean Chemical Society (2001), 22(4), 372-374
CODEN: BKCSDE; ISSN: 0253-2964
PB Korean Chemical Society
DT Journal
LA English
AB Three simple carboxamides incorporating the phenethylamine moiety were isolated from strain XR-NC of the symbiotic bacterium X. nematophilus. Their structures were identified by spectroscopic data and synthesis. The compds. exhibited significant cytotoxicities against human cancer-cell line, viz. gastric adenocarcinoma, colon adenocarcinoma, and lung adenocarcinoma.
IT **92680-90-5**
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(from Xenorhabdus nematophilus)
RN 92680-90-5 HCAPLUS
CN Hexanamide, N-(4,5-dihydro-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)-5-methyl- (9CI) (CA INDEX NAME)



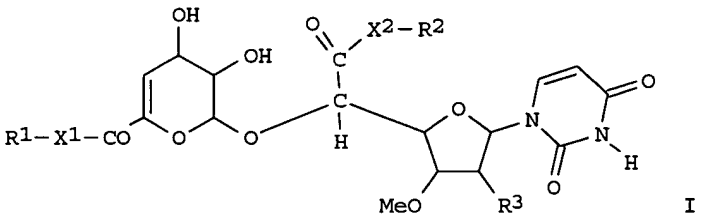
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Akhurst, R	1982	128	3061	J Gen Microbiol	HCAPLUS
Chen, G	1994	4	157	Biol Control	
Forst, S	1996	60	21	Microbiol Rev	HCAPLUS
Ginos, J	1979	22	1323	J Med Chem	HCAPLUS
Huntress, E	1948	13	674	J Org Chem	HCAPLUS
Li, J	1997	43	770	J Microbiol	HCAPLUS
Li, J	1995	58	1081	J Nat Prod	HCAPLUS
Li, J	1996	59	1157	J Nat Prod	HCAPLUS
Maxwell, P	1994	60	715	Appl Environ Microbi	HCAPLUS
McInerney, B	1991	54	774	J Nat Prod	HCAPLUS
McInerney, B	1991	54	785	J Nat Prod	HCAPLUS
Park, S	1999	4	11	Biotechnol Bioproces	
Paul, V	1981	7	589	J Chem Ecol	HCAPLUS
Paul, V	1981	7	589	J Chem Ecol	HCAPLUS
Richardson, W	1988	54	1602	Appl Environ Microbi	HCAPLUS
Ryu, K	2000	5	141	Biotechnol Bioproces	HCAPLUS
Shima, H	1991			JP--05-03792	HCAPLUS
Twentyman, P	1987	56	279	Br J Cancer	MEDLINE

L39 ANSWER 8 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2001:152704 HCAPLUS
DN 134:193674
TI Preparation of A-500359 derivatives as antibacterial agents
IN Hotoda, Hitoshi; Kaneko, Masakatsu; Inukai, Masatoshi; Muramatsu, Yasunori; Utsui, Yukio; Ohya, Satoshi
PA Sankyo Company, Ltd., Japan
SO PCT Int. Appl., 459 pp.
CODEN: PIXXD2
DT **Patent**
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI	WO2001014399	A1	20010301	2000WO-JP05538	20000818 <--
	W: AU, BR, CA, CN, CZ, HU, ID, IL, IN, KR, MX, NO, NZ, PL, RU, TR, US, ZA				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA---2382654	AA	20010301	2000CA-2382654	20000818 <--
	AU2000065955	A5	20010319	2000AU-0065955	20000818 <--
	AU----763492	B2	20030724		
	JP2001192394	A2	20010717	2000JP-0248322	20000818 <--
	EP---1209166	A1	20020529	2000EP-0953494	20000818 <--
	EP---1209166	B1	20040331		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
	TR-200200485	T2	20020621	2002TR-0000485	20000818 <--
	BR2000013435	A	20020716	2000BR-0013435	20000818 <--
	NZ----517315	A	20040227	2000NZ-0517315	20000818 <--
	AT----263183	E	20040415	2000AT-0953494	20000818 <--
	RU---2227799	C2	20040427	2002RU-0104359	20000818 <--
	PT---1209166	T	20040630	2000PT-0953494	20000818 <--
	ES---2216933	T3	20041101	2000ES-0953494	20000818 <--
	NO2002000804	A	20020419	2002NO-0000804	20020219 <--
	ZA2002001409	A	20030519	2002ZA-0001409	20020219 <--
	US2003171330	A1	20030911	2002US-0080191	20020219 <--
	HK---1044951	A1	20040813	2002HK-0106306	20020827 <--
PRAI	1999JP-0233934	A	19990820 <--		
	2000WO-JP05538	W	20000818 <--		
OS	MARPAT 134:193674				
GI					



I

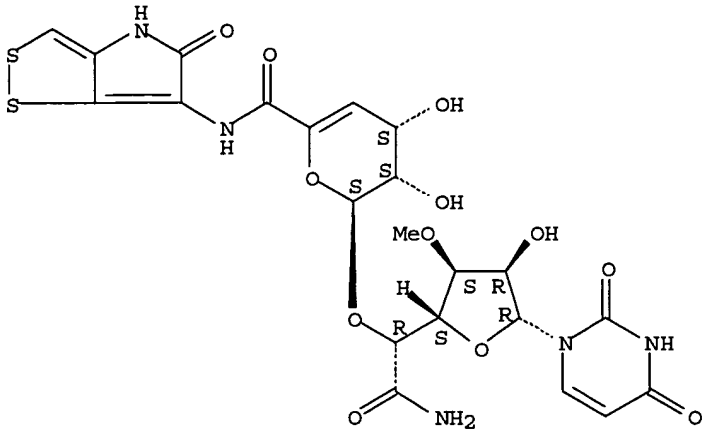
AB The title compds. I [R1 and R2 are each an optionally substituted, aryl, heterocyclic, alkyl or alkenyl group or the like; R3 is hydrogen or hydroxyl; and X1 and X2 are each oxygen, sulfur, or optionally substituted nitrogen] are prepared Compds. of this invention in vitro show min. inhibitory concns. of 0.25 μg/mL to 4 μg/mL against Mycobacterium avium NIHJ 1605, vs. MIC of 8 μg/mL shown by capuramycin. Formulations are given.

IT **327984-63-4P 327985-01-3P 327985-02-4P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of A-500359 derivs. as antibacterial agents)

RN 327984-63-4 HCAPLUS

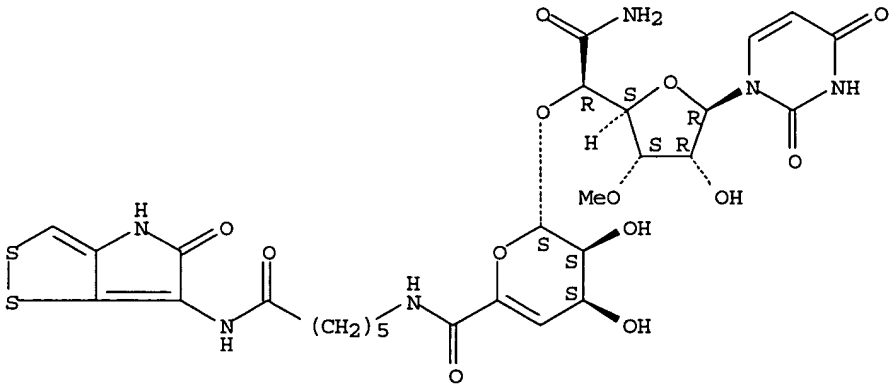
CN α-L-Talofuranuronamide, 1-deoxy-5-O-[4-deoxy-N-(4,5-dihydro-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)-β-L-erythro-hex-4-enopyranuronamidosyl]-1-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-3-O-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



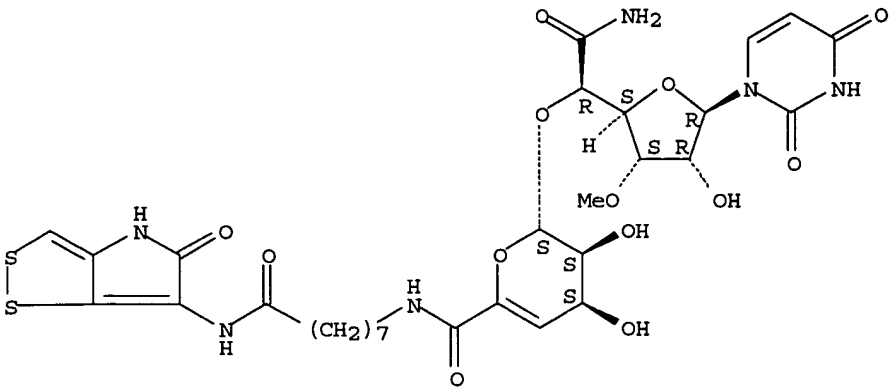
RN 327985-01-3 HCAPLUS
CN α-L-Talofuranuronamide, 1-deoxy-5-O-[4-deoxy-N-[6-[(4,5-dihydro-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)amino]-6-oxohexyl]-β-L-erythro-hex-4-enopyranuronamidosyl]-1-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-3-O-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

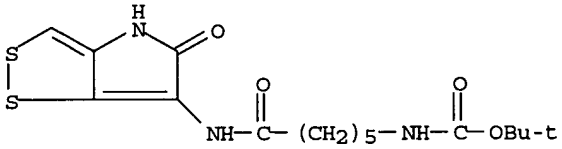


RN 327985-02-4 HCAPLUS
CN α-L-Talofuranuronamide, 1-deoxy-5-O-[4-deoxy-N-[8-[(4,5-dihydro-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)amino]-8-oxooctyl]-β-L-erythro-hex-4-enopyranuronamidosyl]-1-(3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-3-O-methyl- (9CI) (CA INDEX NAME)

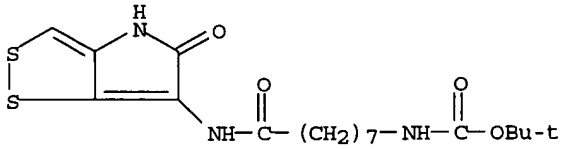
Absolute stereochemistry.



IT **327985-32-0P 327985-33-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of A-500359 derivs. as antibacterial agents)
RN 327985-32-0 HCAPLUS
CN Carbamic acid, [6-[(4,5-dihydro-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)amino]-6-oxohexyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 327985-33-1 HCAPLUS
CN Carbamic acid, [8-[(4,5-dihydro-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)amino]-8-oxooctyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
American Chemical Socie				JP2000159765 A	HCAPLUS
Kanto Ishi Pharma Co Lt	1985			JP--60259190 A	HCAPLUS
Mect Corporation	1993			JP--05148293 A	HCAPLUS
Sankyo Co Ltd				JP2000154187 A	HCAPLUS
Sankyo Co Ltd	2000			WO---0002892 A1	HCAPLUS

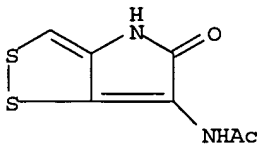
L39 ANSWER 9 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
AN **2001:64572** HCAPLUS
DN 134:219584
TI Antimicrobial properties and mode of action of the pyrrothine holomycin
AU Oliva, Brunello; O'Neill, Alexander; Wilson, Jenny M.; O'Hanlon, Peter J.; Chopra, Ian
CS Department of Experimental Medicine, University of L'Aquila, L'Aquila, 67100, Italy

SO Antimicrobial Agents and Chemotherapy (2001), 45(2), 532-539
CODEN: AMACCQ; ISSN: 0066-4804
PB American Society for Microbiology
DT Journal
LA English

AB Holomycin, a member of the pyrrothine class of antibiotics, displayed broad-spectrum antibacterial activity, inhibiting a variety of gram-pos. and gram-neg. bacteria, with the exception of Enterobacter cloacae, Morganella morganii, and Pseudomonas aeruginosa. The antibiotic lacked activity against the eukaryotic microorganisms Saccharomyces cerevisiae and Candida kefyr. Holomycin exhibited a bacteriostatic response against Escherichia coli that was associated with rapid inhibition of RNA synthesis in whole cells. Inhibition of RNA synthesis could have been a secondary consequence of inhibiting tRNA aminoacylation, thereby inducing the stringent response. However, the levels of inhibition of RNA synthesis by holomycin were similar in a stringent and relaxed pair of E. coli strains that were isogenic except for the deletion of the relA gene. This suggests that inhibition of RNA synthesis by holomycin could reflect direct inhibition of DNA-dependent RNA polymerase. Examination of the effects of holomycin on the kinetics of the appearance of β-galactosidase in induced E. coli cells was also consistent with inhibition of RNA polymerase at the level of RNA chain elongation. However, holomycin only weakly inhibited E. coli RNA polymerase in assays using synthetic poly(dA-dT) and plasmid templates. Furthermore, inhibition of RNA polymerase was observed only at holomycin concns. in excess of those required to inhibit the growth of E. coli. It is possible that holomycin is a prodrug, requiring conversion in the cell to an active species that inhibits RNA polymerase.

IT **488-04-0**, Holomycin
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(antimicrobial properties and mode of action of the pyrrothine holomycin)

RN 488-04-0 HCAPLUS
CN Acetamide, N-(4,5-dihydro-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)- (8CI, 9CI) (CA INDEX NAME)

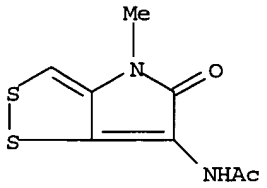


RETABLE

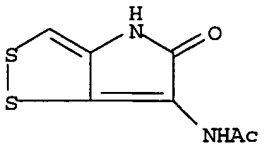
Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Cashel, M	1996		1458	Escherichia coli and	
Celmer, W	1955	77	2861	J Am Chem Soc	HCAPLUS
Cherrington, C	1990	68	69	J Appl Bacteriol	HCAPLUS
Chopra, I	1975	91	433	J Gen Microbiol	MEDLINE
Das, A	1992		68	Emerging targets in	HCAPLUS
Ettlinger, L	1959	42	563	Helv Chim Acta	HCAPLUS
Gross, C	1976	128	382	J Bacteriol	HCAPLUS
Hartmann, G	1967	145	843	Biochim Biophys Acta	HCAPLUS
Hughes, J	1978	176	305	Biochem J	HCAPLUS
Jiminez, A	1973	3	729	Antimicrob Agents Ch	
Jin, D	1996	273	300	Methods Enzymol	HCAPLUS
Juhl, M	1990	56	3179	Appl Environ Microbi	HCAPLUS
Kenig, M	1979	32	549	J Antibiot	HCAPLUS
Khachatourians, G	1974	6	304	Antimicrob Agents Ch	HCAPLUS
Khachatourians, G	1974	119	795	J Bacteriol	HCAPLUS
Miller, J	1992			A short course in ba	

Neidhardt, F	1974	119	736	J Bacteriol	HCAPLUS
Novick, R	1967	33	155	Virology	MEDLINE
Oliva, B	1993	32	817	J Antimicrob Chemoth	HCAPLUS
O'Neill, A	2000	44	3163	Antimicrob Agents Ch	HCAPLUS
Rabussay, D	1969	5	104	FEBS Lett	HCAPLUS
Sambrook, J	1989			Molecular cloning; a	
Seneca, H	1952	2	357	Antibiot Chemother	HCAPLUS
Sivasubramanian, N	1976	145	89	Mol Gen Genet	HCAPLUS
Tipper, D	1973	116	245	J Bacteriol	HCAPLUS
von Daehne, W	1969	22	233	J Antibiot	HCAPLUS
Wehrli, W	1983	5	S407	Rev Infect Dis	HCAPLUS
Wilson, J	1995	39	1925	Antimicrob Agents Ch	HCAPLUS
Xiao, H	1991	266	5980	J Biol Chem	HCAPLUS

L39 ANSWER 10 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
AN **2000:780121** HCAPLUS
DN 134:53745
TI RNA polymerase inhibitors with activity against rifampin-resistant mutants of Staphylococcus aureus
AU O'Neill, Alexander; Oliva, Brunello; Storey, Christopher; Hoyle, Anthony; Fishwick, Colin; Chopra, Ian
CS Antimicrobial Research Centre and Division of Microbiology, University of Leeds, Leeds, LS2 9JT, UK
SO Antimicrobial Agents and Chemotherapy (**2000**), 44(11), 3163-3166
CODEN: AMACCQ; ISSN: 0066-4804
PB American Society for Microbiology
DT Journal
LA English
AB A collection of rifampin-resistant mutants of S. aureus with characterized RNA polymerase β-subunit (rpoB) gene mutations was cross-screened against a number of other RNA polymerase inhibitors to correlate susceptibility with specific rpoB genotypes. The rpoB mutants were cross-resistant to streptolydigin and sorangicin A. In contrast, thiolutin, holomycin, corallopyronin A, and ripostatin A retained activity against the rpoB mutants. The 2nd group of inhibitors may be of interest as drug development candidates.
IT **87-11-6**, Thiolutin **488-04-0**, Holomycin
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(RNA polymerase inhibitors with activity against rifampin-resistant mutants of Staphylococcus aureus)
RN 87-11-6 HCAPLUS
CN Acetamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)- (8CI, 9CI) (CA INDEX NAME)



RN 488-04-0 HCAPLUS
CN Acetamide, N-(4,5-dihydro-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)- (8CI, 9CI) (CA INDEX NAME)



RETABLE

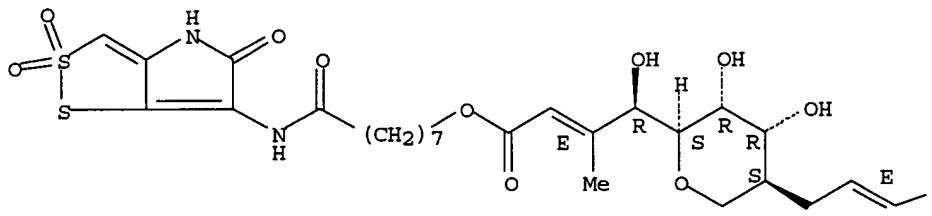
Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Aubry-Damon, H	1998	42	2590	Antimicrob Agents Ch	HCAPLUS
British Society for Ant	1991	27	1	J Antimicrob Chemoth	
Chopra, I	1997	41	497	Antimicrob Agents Ch	HCAPLUS
Chopra, I	1996	275	401	JAMA	MEDLINE
Cohen, M	1992	257	1050	Science	MEDLINE
Das, A	1992		68	Emerging targets in	HCAPLUS
Drancourt, M	1999	43	2400	Antimicrob Agents Ch	HCAPLUS
Enright, M	1998	4	65	Microb Drug Res	HCAPLUS
Heisler, L	1993	268	25369	J Biol Chem	HCAPLUS
Irschik, H	1985	38	145	J Antibiot	HCAPLUS
Irschik, H	1987	40	7	J Antibiot	HCAPLUS
Irschik, H	1995	48	787	J Antibiot	HCAPLUS
Iwakura, Y	1973	121	181	Mol Gen Genet	HCAPLUS
Jiminez, A	1973	3	729	Antimicrob Agents Ch	
Jin, D	1988	202	45	J Mol Biol	HCAPLUS
Jin, D	1996	273	300	Methods Enzymol	HCAPLUS
Kenig, M	1979	32	549	J Antibiot	HCAPLUS
Khachatourians, G	1974	119	795	J Bacteriol	HCAPLUS
Lisitsyn, N	1984	196	173	Mol Gen Genet	HCAPLUS
Novick, R	1967	33	155	Virology	MEDLINE
Parenti, F	1997		453	Antibiotic and chemo	HCAPLUS
Ramaswamy, S	1998	79	3	Tuberc Lung Dis	MEDLINE
Reichenbach, H	1999		149	Drug discovery from	HCAPLUS
Romele, G	1990	43	88	J Antibiot	
Sambrook, J	1987			Molecular cloning: a	
Seneca, H	1952	2	357	Antibiot Chemother	HCAPLUS
Troyer, J	1998	42	1845	Antimicrob Agents Ch	HCAPLUS
Wichelhaus, T	1999	43	2813	Antimicrob Agents Ch	HCAPLUS
Williams, D	1998	42	1853	Antimicrob Agents Ch	HCAPLUS
Zahner, H	1995		67	Fifty years of antim	

L39 ANSWER 11 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
AN **2000:288119** HCAPLUS
DN 133:71176
TI Thiomarinols: discovery from a marine bacterium, structure-activity relationship, and efficacy as topical antibacterial agents
AU Shiozawa, Hideyuki; Fukuoka, Takashi; Fujimoto, Katsumi; Kodama, Kentaro
CS Biomedical Research Laboratories, SANKYO CO. LTD., Tokyo, 140-8710, Japan
SO Annual Report of Sankyo Research Laboratories (**1999**), 51, 45-72
CODEN: ASRLEC; ISSN: 1341-741X
PB Sankyo Co., Ltd., Research Institute
DT Journal; General Review
LA English
AB A review with 56 refs. on thiomarinols, including discovery of the producing strain (Alteromonas rava) from a marine environment, structural features, biol. activities, structure-activity relationship, ode of action, and evaluation of thiomarinol B as a topical agent.
IT **156098-43-0D**, Thiomarinol B, analogs
RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(discovery of thiomarinols from a marine bacterium, structure-activity relationship, and efficacy as topical antibacterial agents)

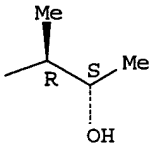
RN 156098-43-0 HCAPLUS
CN L-glycero-D-altro-Non-2-enonic acid, 5,9-anhydro-2,3,8-trideoxy-8-[(2E,4R,5S)-5-hydroxy-4-methyl-2-hexenyl]-3-methyl-, 8-[(4,5-dihydro-2,2-dioxido-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)amino]-8-oxooctyl ester, (2E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.

PAGE 1-A



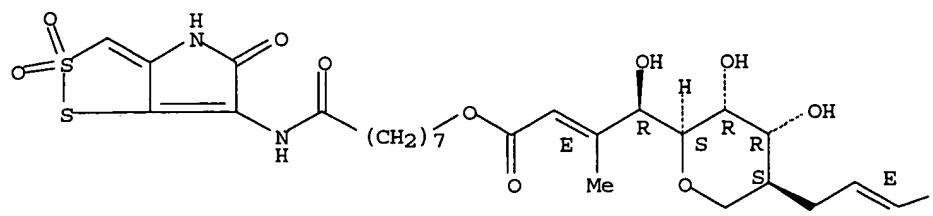
PAGE 1-B



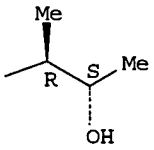
IT **156098-43-0**, Thiomarinol B
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(evaluation as a topical antibacterial agent)
RN 156098-43-0 HCAPLUS
CN L-glycero-D-altro-Non-2-enonic acid, 5,9-anhydro-2,3,8-trideoxy-8-[(2E,4R,5S)-5-hydroxy-4-methyl-2-hexenyl]-3-methyl-, 8-[(4,5-dihydro-2,2-dioxido-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)amino]-8-oxooctyl ester, (2E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.

PAGE 1-A



PAGE 1-B

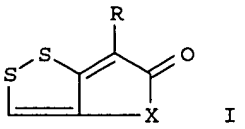


RETABLE

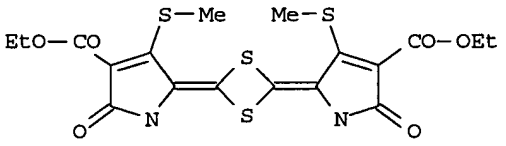
Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Abe, Y	1992	4	42	J Dermatol Sci	MEDLINE
Baggaley, K	1994			WO---9426750	HCAPLUS
Basker, M	1980	1	471	Current chemotherapy	HCAPLUS
Baumann, P	1984	1	343	Bergey's Manual of S	
Bhate, D	1960	16	504	Experientia	HCAPLUS
Burkholder, P	1966	14	649	Appl Microbiol	MEDLINE
Casewell, M	1987	19	1	J Antimicrob Chemoth	MEDLINE
Celmer, W	1955	77	2861	J Am Chem Soc	HCAPLUS
Chain, E	1977		294	J Chem Soc Perkin Tr	HCAPLUS
Chain, E	1977		318	J Chem Soc Perkin Tr	HCAPLUS
Class, Y	1995	95	1843	Chem Rev	HCAPLUS
Clayton, J	1979		308	J Chem Soc Perkin Tr	HCAPLUS
Clayton, J	1982		2827	J Chem Soc Perkin Tr	HCAPLUS
Ettlinger, L	1959	42	563	Helv Chim Acta	HCAPLUS
Fujimoto, K	1994			Jpn Kokai Tokkyo Koh	
Fuller, A	1971	234	416	Nature	HCAPLUS
Gauthier, G	1995	45	775	Int J Syst Bacteriol	
Holder, I	1971	11	1041	J Trauma	MEDLINE
Hughes, J	1978	176	305	Biochem J	HCAPLUS
Hughes, J	1980	191	209	Biochem J	HCAPLUS
Hughes, J	1978	31	330	J Antibiot	HCAPLUS
Janssen, D	1993	37	2003	Antimicrob Agents Ch	HCAPLUS
Jensen, B	1971	27	392	Acta Cryst B	HCAPLUS
Jensen, B	1969	22	231	J Antibiot	HCAPLUS
Jimenez, A	1973	3	729	Antimicrob Agents Ch	HCAPLUS
Joshi, A	1982	22	541	Antimicrob Agents Ch	HCAPLUS
Kameyama, T	1987	40	1664	J Antibiot	HCAPLUS
Khachatourians, G	1974	6	306	Antimicrob Agents Ch	
Khachatourians, G	1974	119	795	J Bacteriol	HCAPLUS
Kodama, K	1993	45	131	Annu Rep Sankyo Res	HCAPLUS
Korzybski, T	1978	1	748	Antibiotics Origin,	
Lang, S	1992	105	438	NZ Med J	MEDLINE
Li, J	1995	58	1081	J Nat Prod	HCAPLUS
McInerney, B	1991	54	774	J Nat Prod	HCAPLUS
McRipley, R	1976	10	38	Antimicrob Agents Ch	MEDLINE
Naguib, M	1993	39	400	Chemotherapy	HCAPLUS
Okamura, K	1977	30	334	J Antibiot	HCAPLUS
O'Hanlon, P	1983		2655	J Chem Soc Perkin Tr	HCAPLUS
Rahman, M	1989	102	261	Epidemiol Infect	HCAPLUS
Riley, T	1994	161	397	Med J Aust	MEDLINE
Roza, J	1986	39	609	J Antibiot	HCAPLUS
Russel, H	1968		497	Antimicrob Agents Ch	
Sato, A	1995	47	1	Annu Rep Sankyo Res	HCAPLUS
Shiozawa, H	1993	46	1834	J Antibiot	HCAPLUS
Shiozawa, H	1994	47	851	J Antibiot	HCAPLUS
Shiozawa, H	1995	48	907	J Antibiot	HCAPLUS
Shiozawa, H	1997	50	449	J Antibiot	HCAPLUS

Sivasubramanian, N	1976	145	89	Mol Gen Genet	HCAPLUS
Stierle, D	1992	48	1165	Experientia	HCAPLUS
Sutherland, R	1985	27	495	Antimicrob Agents Ch	HCAPLUS
Tanaka, N	1998		47	Proceedings of the 6	
Tipper, D	1973	116	245	J Bacteriol	HCAPLUS
Udo, E	1994	26	157	J Hosp Infect	MEDLINE
Umezawa, H	1983	36	471	J Antibiot	HCAPLUS
von Daehne, W	1969	22	233	J Antibiot	HCAPLUS
Ward, A	1986	32	425	Drugs	HCAPLUS

L39 ANSWER 12 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
AN **1999:337025** HCAPLUS
DN 131:87856
TI Fused 1,2-dithioles. Part 5. Carbenoid anions as intermediates in reactions of pyrrothins and their hetero analogs
AU Schachtner, J. E.; Nienaber, J.; Stachel, H.-D.; Waisser, K.
CS Inst. Pharmazie, Zentrum Pharmaforschung, Univ. Munich, Munich, D-80333, Germany
SO Pharmazie (**1999**), 54(5), 335-340
CODEN: PHARAT; ISSN: 0031-7144
PB Govi-Verlag Pharmazeutischer Verlag
DT Journal
LA English
OS CASREACT 131:87856
GI

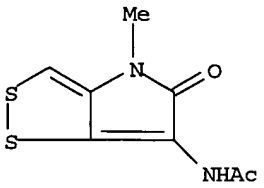


I



II

AB Pyrrothins like thiolutin and other bicyclic 1,2-dithioles of type I (X = NH, NMe, O, S) unsubstituted in 3-position are marked by their CH acidity. In the presence of weak bases such as Et3N, dithiolo[4,3-b]pyrrolone I (X = NMe, R = CO2Et) degraded via its anion to a thioketene trapped as 1,3-dithietane II. The carbenoid anions of I reacted with elemental S forming enethiolates whose alkylation led to the corresponding 3-thioethers or, in the case of a thiolactam analog, to 3-thioxo-1,2-1,2-dithiolo[4,3-b]pyrroles. In the same manner selenides can he obtained via intermediate selenolate ions. Introduction of an aryl- or hetarylthio group into I was achieved directly by reaction of the corresponding anions with suitable disulfides. The new compds. exhibited activity against Mycobacterium tuberculosis in primary screening.
IT **87-11-6**, Thiolutin
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(tuberculostatic activity)
RN 87-11-6 HCAPLUS
CN Acetamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)- (8CI, 9CI) (CA INDEX NAME)

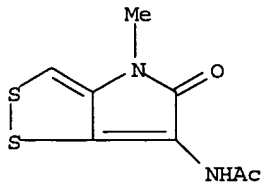


RETABLE

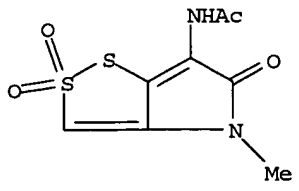
Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Behringer, H	1981		1729	Liebigs Ann	HCAPLUS
Bordwell, F	1991	113	985	J Amer Chem Soc	HCAPLUS
Braun, M	1993	E 19d	178	Methoden der organis	
Braun, M	1993	E 19d	932	Methoden der organis	
Breslow, R	1957	79	1762	J Amer Chem Soc	HCAPLUS
Breslow, R	1958	80	3719	J Amer Chem Soc	HCAPLUS
Celmer, W	1952	74	6304	J Am Chem Soc	HCAPLUS
Celmer, W	1955	77	2861	J Am Chem Soc	HCAPLUS
Dickinson, J	1995	1	1089	Comprehensive Organi	
Duus, H	1993	E 8a	517	Methoden der Organis	
Ebetino, F	1990	30	855	Heterocycles	HCAPLUS
Eckl, E	1986			Diss Univ Munchen	
Ekogha, C	1983	24	4825	Tetrahedron Lett	HCAPLUS
Ettlinger, L	1959	42	563	Helv Chim Acta	HCAPLUS
Freund, M	1895	28	74	Chem Ber	
Hakimelahi, G	1982	23	913	Tetrahedron Lett	HCAPLUS
Helquist, P	1993	4	951	Comprehensive Organi	
Husslein, M	1987			Diss Univ Munchen	
Joriczyk, A	1997	E 17a	776	Methoden der Organis	
Klingsberg, E	1963	28	529	J Org Chem	HCAPLUS
Kluger, R	1987	87	863	Chem Rev	HCAPLUS
Krief, A	1993	3	85	Comprehensive Organi	
Lien, E	1993	40	163	Progress in Drug Res	HCAPLUS
Liotta, D	1980	21	3643	Tetrahedron Lett	HCAPLUS
Matsumoto, T	1985	50	603	J Org Chem	HCAPLUS
Mikolajczyk, M	1980		127	Synthesis	HCAPLUS
Miyashita, A	1996	43	509	Heterocycles	HCAPLUS
Nakayama, J	1983	24	2585	Tetrahedron Lett	HCAPLUS
Nienaber, J	1991			Diss Univ Munchen	
Prinzbach, H	1966	78	492	Angew Chem	
Prinzbach, H		5	513	Angew Chem Int Ed	
Regitz, M	1996	108	791	Angew Chem	
Regitz, M		35	725	Angew Chem Int Ed	HCAPLUS
Reich, H	1975	97	5434	J Amer Chem Soc	HCAPLUS
Reich, H	1980	45	5227	J Org Chem	HCAPLUS
Schachtner, J				to be published in J	
Schaumann, E	1985	E 11	233	Methoden der Organis	
Scheibye, S	1979	35	1339	Tetrahedron	HCAPLUS
Schoberl, A	1955	9	200	Methoden der Organis	
Schorp, M	1990			Diss Univ Munchen	
Sorensen, H	1971	8	551	J Heterocycl Chem	HCAPLUS
Stachel, H	1997	62	510	Collect Czech Chem C	HCAPLUS
Stachel, H	1992		1039	Liebigs Ann Chem	HCAPLUS
Stachel, H	1992		473	Liebigs Ann Chem	HCAPLUS
Stachel, H	1993		305	Liebigs Ann Chem	HCAPLUS
Stetter, H	1976	88	695	Angew Chem	HCAPLUS
Stetter, H		15	639	Angew Chem Int Ed	
Toshimitsu, A	1984	49	3796	J Org Chem	HCAPLUS
Umezawa, H	1948	1	512	Japan Med J	HCAPLUS
Wanzlick, H	1964	97	3513	Chem Ber	HCAPLUS
Wuyts, H	1903	29	689	Bull Soc Chim Fr	HCAPLUS

Zoller, U Zoukas, T	1996 1994	1B	1113	Comprehensive Hetero Diss Univ Munchen	HCAPLUS

L39 ANSWER 13 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
AN **1999:216717** HCAPLUS
DN 130:352202
TI Fused 1,2-dithioles. IV. Synthesis and reactions of 1,2-dithiole s-oxides
AU Schachtner, Josef Emmeram; Zoukas, Thomas; Stachel, Hans-Dietrich; Polborn, Kurt; Noth, Heinrich
CS Institut fur Pharmazie und Lebensmittelchemie der Universitat Munchen, Munchen, D-80333, Germany
SO Journal of Heterocyclic Chemistry (**1999**), 36(1), 161-175
CODEN: JHTCAD; ISSN: 0022-152X
PB HeteroCorporation
DT Journal
LA English
OS CASREACT 130:352202
AB 1,2-Dithiolopyrrolones and their heterologs are resonance-stabilized systems displaying a high dipole moment. Upon oxidation with organic peracids such compds. gave the corresponding S(2)-oxides and, depending on substituents, in some cases the S(2)- and S(1)-dioxides. Suitable starting materials were 4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrole-3,6-dicarboxylic acid di-Me ester and 4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrole-3,6-dicarboxylic acid 3-Et 5-Me ester. The S(2)-monoxides showed a proclivity to disproportionation and were easily reduced to dithioles with sym. dimethylhydrazine. From S(2)-oxides and several primary amines bicyclic isothiazole-S-oxides were obtained (S/N-exchange reaction). From an N-unsubstituted isothiazole S-oxide, an N-hydroxyisothiazole was synthesized by an aza-Pummerer-type rearrangement. The assumption is made that S(2)-oxides may be biol. important (no data) as active metabolites of pyrrothine derivs. in their action as antibacterial agents and antimycobacterial agents.
IT **87-11-6**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation and reactions of 1,2-dithiolo[4,3-b]pyrrole-3,6-dicarboxylate oxide derivs.)
RN 87-11-6 HCAPLUS
CN Acetamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)- (8CI, 9CI) (CA INDEX NAME)



IT **224171-21-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 224171-21-5 HCAPLUS
CN Acetamide, N-(4,5-dihydro-4-methyl-2,2-dioxido-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)- (9CI) (CA INDEX NAME)



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Adams, J	1996	3	308	Burger's Medicinal C	
Behrozzi, S	1996	35	1768	J Biochemistry	
Block, E	1992	31	1135	Angew Chem Int Ed En	
Block, E	1986	108	7045	J Am Chem Soc	HCAPLUS
Block, E	1996	118	2790	J Am Chem Soc	HCAPLUS
Block, E	1996	118	2799	J Am Chem Soc	HCAPLUS
Blockand, E	1974	96	3921	J Am Chem Soc	
Burger, A	1991	37	287	Progress in Drug Res	HCAPLUS
Capozzi, G	1990		413	The Chemistry of Sul	
Celmer, W	1952	74	6304	J Am Chem Soc	HCAPLUS
Clemer, W	1955	77	2861	J Am Chem Soc	
Cohen, N	1995	45	205	Drug Research	HCAPLUS
Craine, L	1989	89	689	Chem Rev	HCAPLUS
Davis, F	1976	41	897	J Org Chem	HCAPLUS
Dewar, M				GAUSSIAN 94	
Dewar, M	1985	107	3902	J Am Chem Soc	HCAPLUS
Drabowicz, J				J Org Chem	
Drabowicz, J	1990		221	The Chemistry of Sul	HCAPLUS
Dunbar, J	1966	31	2842	J Org Chem	HCAPLUS
Ellis, J	1977	42	2891	J Org Chem	HCAPLUS
Ettlinger, L	1959	42	563	Helv Chim Acta	HCAPLUS
Exner, O	1997		261	The Chemistry of Dou	
Eyer, P	1996		999	The Chemistry of Ami	
Famulok, M	1988	28	337	Angew Chem Int Ed En	
Field, L	1969	34	1792	J Org Chem	HCAPLUS
Field, L	1971	36	309	J Org Chem	HCAPLUS
Finch, N	1980	45	3416	J Org Chem	HCAPLUS
Folkins, P	1991	113	8998	J Am Chem Soc	HCAPLUS
Folkins, P	1993	115	3066	J Am Chem Soc	HCAPLUS
Folkins, P	1991	56	904	J Org Chem	HCAPLUS
Fuchs, T	1997			Part of the Ph D Dis	
Fukushima, D	1978	83	1019	J Biochem	HCAPLUS
Greene, F	1969	34	2263	J Org Chem	HCAPLUS
Gurtler, O	1980	35b	539	Z Naturforsch	
Hafelinger, G	1994		17	The Chemistry of Ena	
Hart, H	1973	V	598	Organic Syntheses Co	
Immerz-Winkler, E	1981			Part of the Ph D Dis	
Isola, M	1982		1381	Tetrahedron Letters	HCAPLUS
Jocelyn, P	1972			The Biochemistry of	
Johnson, C	1979	3	223	Comprehensive Organi	HCAPLUS
Kanda, Y	1993	115	8451	J Am Chem Soc	HCAPLUS
Kice, J	1962	27	4654	J Org Chem	HCAPLUS
Kim, Y	1978		2305	Tetrahedron Letters	HCAPLUS
Kobayashi, T	1977	99	5505	J Am Chem Soc	HCAPLUS
Kresze, G	1962	715	223	Liebigs Ann Chem	
Lien, E	1993	40	163	Progress in Drug Res	HCAPLUS
Louw, R	1976	496		Chem Commun	
Luchterhandt, T	1998			Part of the Ph D Dis	
Maricich, T	1973	95	5831	J Am Chem Soc	HCAPLUS
Mc Celland, R	1996	9	355	J Phys Org Chem	
Miura, Y	1978	1	521	Chem Letters	
Murray, R	1972	37	3516	J Org Chem	HCAPLUS
Murray, R	1971		299	Tetrahedron Letters	HCAPLUS
Novak, M	1995	117	574	J Am Chem Soc	HCAPLUS
Oae, S	1982	18	41	Heterocycles	HCAPLUS
Oae, S	1980		3213	Tetrahedron Letters	HCAPLUS
Pattenden, G	1992		1215	J Chem Soc Perkin Tr	HCAPLUS
Pawlenko, S	1985	E11	1125	Houben-Weyl Organisc	
Perrone, E	1986	51	3413	J Org Chem	HCAPLUS
Prous, J	1997	19	149	Annu Drug Data Rep	
Saupe, T	1986	25	451	Angew Chem Int Ed En	

Schubart, R	1985	E11	107	Houben-Weyl Methoden	
Sheldrick, G	1993			SHELXL-93	
Sheldrick, G	1990			SHELXS-86	
Shiozawa, H	1997	50	449	J Antibiot	HCAPLUS
Stachel, H	1997	62	510	Collect Czech Chem C	HCAPLUS
Stachel, H	1992		1039	Liebigs Ann Chem	HCAPLUS
Stachel, H	1992		473	Liebigs Ann Chem	HCAPLUS
Stachel, H	1993		305	Liebigs Ann Chem	HCAPLUS
Takata, T	1981	54	1443	Bull Chem Soc Japan	HCAPLUS
Takata, T	1983		3631	Tetrahedron Letters	HCAPLUS
Takata, T	1990		535	The Chemistry of Sul	
Tsukamoto, G	1969	42	2566	Bull Chem Soc Japan	HCAPLUS
Umezawa, H	1948	1	512	Japan Med J	HCAPLUS
Venier, C	1982	47	3773	J Org Chem	HCAPLUS
Windt, A	1997			Part of the Ph D Dis	
Zimmer, B	1995			Part of the Ph D Dis	
Zsolnai, L	1994			XPMA ZORTEP	

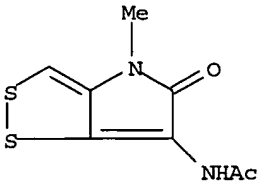
L39 ANSWER 14 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
AN **1998:733275** HCAPLUS
DN 130:136436
TI In vivo characterization of the drug resistance profile of the major ABC transporters and other components of the yeast pleiotropic drug resistance network
AU Kolaczkowski, Marcin; Kolaczkowska, Anna; Luczynski, Jacek; Witek, Stanislaw; Goffeau, Andre
CS Unite de Biochimie Physiologique, Universite Catholique de Louvain, Louvain la Neuve, Belg.
SO Microbial Drug Resistance (Larchmont, New York) (**1998**), 4(3), 143-158
CODEN: MDREFJ; ISSN: 1076-6294
PB Mary Ann Liebert, Inc.
DT Journal
LA English
AB Multidrug resistance (MDR) mediated by broad specificity transporters is one of the most important strategies used by pathogens, including cancer cells, to evade chemotherapy. In the yeast Saccharomyces cerevisiae, a complex pleiotropic drug resistance (PDR) network of genes involved in MDR is composed of the transcriptional regulators Pdr1p and Pdr3p, which activate expression of the ATP-binding cassette (ABC) MDR transporter-encoding genes PDR5, SNQ2, and YOR1 as well as other not yet identified genes. Three hundred forty-nine toxic compds. were screened in isogenic S. cerevisiae strains deleted of PDR5, SNQ2, or YOR1 in different combinations as well as both PDR1 and PDR3. The screen revealed extremely promiscuous, yet limited, and to a large extent overlapping but distinct drug resistance profiles of Pdr5p, Snq2p, and Yor1p. These ABC-MDR transporters mediated resistance to most currently available classes of clin. and agriculturally important fungicides and also to many antibiotics, herbicides, and others. Several classes of compds. were identified for the 1st time in the drug resistance spectrum of MDR transporters. These are fungicides, such as anilinopyrimidines, benzimidazoles, benzenedicarbonitriles, dithiocarbamates, guanidines, imidothiazoles, polyenes, pyrimidynyl carbinols, and strobilurin analogs; the urea derivative and anilide herbicides; flavonoids, several membrane lipids resembling detergents; and newly synthesized lysosomotropic aminoesters; as well as many others. Identification of compds. showing Pdr1p, Pdr3p-dependent, but Pdr5p-, Snq2p-, and Yor1p-independent toxicity, reflected in the case of rhodamine 6G, by efflux alterations, suggests the involvement of new drug resistance genes and is a first step toward their identification. The highly increased toxicity of bile acids toward the PDR1, PDR3 double disruptant together with the decreased level of BAT1 promoter dependent β-galactosidase activity suggest that the Bat1p ABC transporter is a new member of the PDR network. These results may contribute to a better understanding of the mechanism of MDR, in particular in the pathogenic yeast Candida albicans. They also provide an indication of the physiol. function of MDR transporters and suggest new

approaches for the cloning of the mammalian bile acid transporters.

IT **87-11-6**, Thiolutin
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(drug resistance profile of the major ABC transporters and other components of the yeast pleiotropic drug resistance network)

RN 87-11-6 HCAPLUS

CN Acetamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)-(8CI, 9CI) (CA INDEX NAME)



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Alani, E	1987	116	541	Genetics	HCAPLUS
Alarco, A	1997	272	19304	J Biol Chem	HCAPLUS
Albertson, G	1996	40	2835	Antimicrob Agents Ch	HCAPLUS
Balzi, E	1995	27	71	J Bioenerg Biomembr	HCAPLUS
Balzi, E	1987	262	16871	J Biol Chem	HCAPLUS
Bien, M	1995	43	108	Bull Polish Acad Sci	
Bissonnette, L	1991	173	4493	J Bacteriol	HCAPLUS
Boeke, J	1984	197	345	Mol Gen Genet	HCAPLUS
Bolhuis, H	1996	15	4239	EMBO J	HCAPLUS
Bolhuis, H	1996	271	24123	J Biol Chem	HCAPLUS
Borst, P	1995	49	427	Ann Rev Microbiol	HCAPLUS
Bradford, M	1976	72	248	Anal Biochem	HCAPLUS
Breeden, L	1985	50	643	Cold Spring symposia	HCAPLUS
Carvajal, E	1997	256	406	Mol Gen Genet	HCAPLUS
Castro, A	1997	53	89	Biochem Pharmacol	
Cohen, B	1992	1108	49	Biochem Biophys Acta	HCAPLUS
Como, J	1994	330	263	N Engl J Med	MEDLINE
Cui, Z	1996	271	14712	J Biol Chem	HCAPLUS
Decottignies, A	1994	269	12797	J Biol Chem	HCAPLUS
Decottignies, A	1995	270	18150	J Biol Chem	HCAPLUS
Decottignies, A	1997	15	137	Nature Genet	HCAPLUS
Del Sorbo, G	1997	254	417	Mol Gen Genet	HCAPLUS
Delahodde, A	1995	15	4043	Mol Cell Biol	HCAPLUS
Delaveau, T	1994	244	501	Mol Gen Genet	HCAPLUS
Desomer, J	1992	6	2377	Mol Microbiol	HCAPLUS
Doige, C	1993	47	291	Ann Rev Microbiol	HCAPLUS
Dudler, R	1992	267	5882	J Biol Chem	HCAPLUS
Edgar, R	1997	179	2274	J Bacteriol	HCAPLUS
Ehrenhofer-Murray, A	1994	244	287	Mol Gen Genet	HCAPLUS
Emr, S	1986	102	523	J Cell Biol	HCAPLUS
Gietz, R	1995	11	355	Yeast	HCAPLUS
Goffeau, A	1997	13	43	Yeast	HCAPLUS
Gompel-Klein, P	1990	18	93	Curr Genet	MEDLINE
Gottesman, M	1993	62	385	Ann Rev Biochem	HCAPLUS
Gottesman, M	1995	29	607	Ann Rev Genet	HCAPLUS
Hirata, D	1994	26	285	Curr Genet	HCAPLUS
Holt, J	1993	44	203	Ann Rev Plant Physio	HCAPLUS
Homolya, L	1993	268	21493	J Biol Chem	HCAPLUS
Josephhorne, T	1996	34	223	J Med Vet Mycol	MEDLINE
Josephhorne, T	1996	42	637	Phytochemistry	HCAPLUS
Katzmann, D	1996	271	23049	J Biol Chem	HCAPLUS
Katzmann, D	1995	15	6875	Mol Cell Biol	HCAPLUS

Kavallaris, M	1993	190	79	Biochem Biophys Res	HCAPLUS
Kean, L	1997	138	255	J Cell Biol	HCAPLUS
Kelly, S	1997	400	80	FEBS Lett	HCAPLUS
Kolaczkowski, M	1996	271	31543	J Biol Chem	HCAPLUS
Kolaczkowski, M	1997	76	219	Pharmacol Therap	HCAPLUS
Leonard, J	1994	38	2492	Antimicrob Agents Ch	
Leppert, G	1990	125	13	Genetics	HCAPLUS
Levchenko, A	1984	20	1088	Genetika	HCAPLUS
Mahe, Y	1996	20	109	Molec Microbiol	HCAPLUS
Meyers, S	1992	21	431	Curr Genet	HCAPLUS
Miller, J	1972		352	Experiments in molec	
Neu, H	1992	257	1064	Science	HCAPLUS
Nikaido, H	1994	264	382	Science	HCAPLUS
Nolte, F	1997	41	196	Antimicrob Agents Ch	HCAPLUS
Odds, F	1996	6	145	Int J Antimicrob Age	HCAPLUS
Ortiz, D	1997	272	15358	J Biol Chem	HCAPLUS
Parks, L	1985	111	333	Meth Enzymol	HCAPLUS
Paul, S	1996	35	13647	Biochemistry	HCAPLUS
Paul, S	1996	35	14003	Biochemistry	HCAPLUS
Paul, S	1996	93	6929	Proc Natl Acad Sci U	HCAPLUS
Paulsen, I	1996	60	575	Microbiol Rev	HCAPLUS
Prasad, R	1995	27	320	Curr Genet	HCAPLUS
Rank, G	1974	80	483	Genetics	
Rank, G	1976	144	281	Molec Gen Genet	HCAPLUS
Rubio, J	1996	12	135	Parisitol Today	HCAPLUS
Sanglard, D	1995	39	2378	Antimicrob Agents Ch	HCAPLUS
Sanglard, D	1996	40	2300	Antimicrob Agents Ch	HCAPLUS
Sanglard, D	1997	143	405	Microbiol	HCAPLUS
Schnappinger, D	1996	165	359	Arch Microbiol	HCAPLUS
Servos, J	1993	236	214	Mol Gen Genet	HCAPLUS
Shapiro, A	1997	53	587	Biochem Pharmacol	HCAPLUS
Sikorski, R	1989	122	19	Genetics	HCAPLUS
Smart, C		271	19351	J Biol Chem	HCAPLUS
Taiz, L	1991		318	Plant physiology	
Tomlin, C	1994			The pesticide manual	
van Helvoort, A	1996	87	507	Cell	HCAPLUS
van Veen, H	1996	93	10668	Proc Natl Acad Sci U	HCAPLUS
Vanden Bossche, H	1995		431	Modern selective fun	
Versantvoort, C	1994	48	1129	Biochem Pharmacol	HCAPLUS
Versantvoort, C	1993	68	939	Br J Cancer	HCAPLUS
Wang, W	1996	31	683	Plant Molec Biol	HCAPLUS
Wendler, F	1997	272	27091	J Biol Chem	HCAPLUS
Winston, F	1995	11	53	Yeast	HCAPLUS
Zhang, K	1996	52	1631	Biochem Pharmacol	HCAPLUS

L39 ANSWER 15 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1994:455993 HCAPLUS
DN 121:55993
TI Thiomarinol derivatives, and processes for their preparation
IN Takahashi, Shuji; Shiozawa, Hideyuki; Kagasaki, Takeshi; Ogawa, Kaneo; Kodama, Kentaro; Ishii, Akira; Fujimoto, Katsumi; Iwano, Yuji; Hirai, Koichi; et al.
PA Sankyo Co., Ltd., Japan
SO Can. Pat. Appl., 51 pp.
CODEN: CPXXEB
DT **Patent**
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	CA---2106443	AA	19940319	1993CA-2106443	19930917	<--
	IL----107017	A1	19980104	1993IL-0107017	19930915	<--
	AU---9347379	A1	19940324	1993AU-0047379	19930916	<--
	AU----665860	B2	19960118			
	ZA---9306840	A	19940414	1993ZA-0006840	19930916	<--
	CZ----281324	B6	19960814	1993CZ-0001930	19930916	<--

FI---9304076	A	19940319	1993FI-0004076	19930917 <--
FI----103055	B1	19990415		
NO---9303328	A	19940321	1993NO-0003328	19930917 <--
EP----595458	A1	19940504	1993EP-0307362	19930917 <--
EP----595458	B1	19981125		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP--06336487	A2	19941206	1993JP-0231332	19930917 <--
JP---2532199	B2	19960911		
HU-----70185	A2	19950928	1993HU-0002629	19930917 <--
HU----219380	B	20010328		
RU---2101353	C1	19980110	1993RU-0053043	19930917 <--
AT----173735	E	19981215	1993AT-0307362	19930917 <--
ES---2125309	T3	19990301	1993ES-0307362	19930917 <--
CN---1092811	A	19940928	1993CN-0119620	19930918 <--
CN---1053446	B	20000614		
KR----177839	B1	19990320	1993KR-0018972	19930918 <--
US---5399711	A	19950321	1993US-0124396	19930920 <--
JP--06199865	A2	19940719	1993JP-0273355	19931101 <--
JP---3123864	B2	20010115		
JP--06206884	A2	19940726	1993JP-0275108	19931104 <--
JP--07094458	B4	19951011		
RU---2089548	C1	19970910	1995RU-0107329	19950511 <--
FI---9801359	A	19980612	1998FI-0001359	19980612 <--
FI----105814	B1	20001013		
HK---1006935	A1	20000519	1998HK-0106112	19980623 <--
PRAI 1992JP-0248970	A	19920918 <--		
1992JP-0294170	A	19921102 <--		
1992JP-0295695	A	19921105 <--		

AB Two thiomarinol derivs., which have antibacterial and anti-mycoplasmal properties, are obtainable from microorganisms of the genus Alteromonas and are named thiomarinol B and thiomarinol C. Thiomarinol B can also be prepared by the oxidation of thiomarinol.

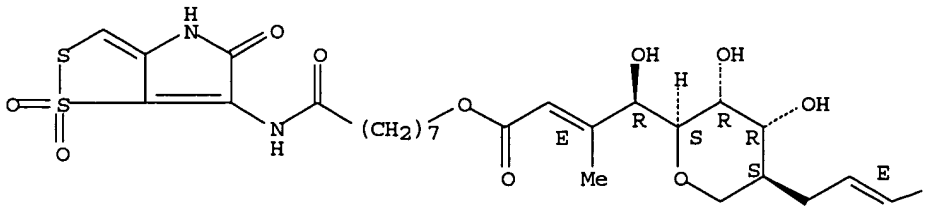
IT **156098-42-9**, Thiomarinol B 1 **156098-43-0**, Thiomarinol B 2 **156343-39-4**
RL: BIOL (Biological study)
(from Alteromonas, antibacterial and anti-mycoplasmal properties of)

RN 156098-42-9 HCAPLUS

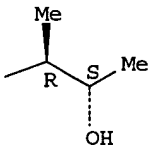
CN L-glycero-D-altro-Non-2-enonic acid, 5,9-anhydro-2,3,8-trideoxy-8-(5-hydroxy-4-methyl-2-hexenyl)-3-methyl-, 8-[(4,5-dihydro-1,1-dioxido-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)amino]-8-oxooctyl ester, [2E,8(2E,4R,5S)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.

PAGE 1-A



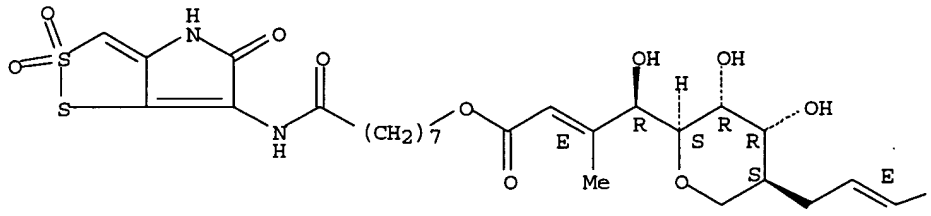
PAGE 1-B



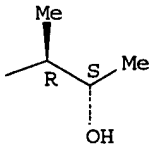
RN 156098-43-0 HCAPLUS
CN L-glycero-D-altro-Non-2-enonic acid, 5,9-anhydro-2,3,8-trideoxy-8-[(2E,4R,5S)-5-hydroxy-4-methyl-2-hexenyl]-3-methyl-, 8-[(4,5-dihydro-2,2-dioxido-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)amino]-8-oxooctyl ester, (2E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.

PAGE 1-A



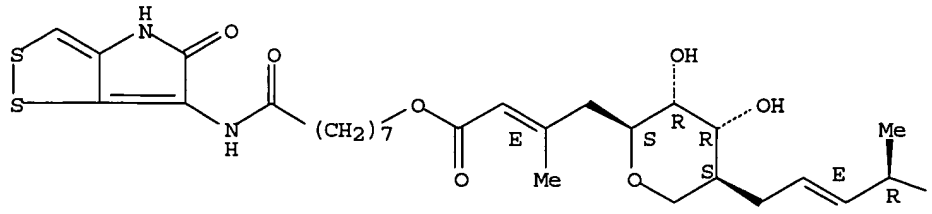
PAGE 1-B



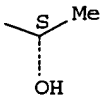
RN 156343-39-4 HCAPLUS
CN L-talo-Non-2-enonic acid, 5,9-anhydro-2,3,4,8-tetradeoxy-8-(5-hydroxy-4-methyl-2-hexenyl)-3-methyl-, 8-[(4,5-dihydro-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)amino]-8-oxooctyl ester, [2E,8(2E,4R,5S)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A



PAGE 1-B

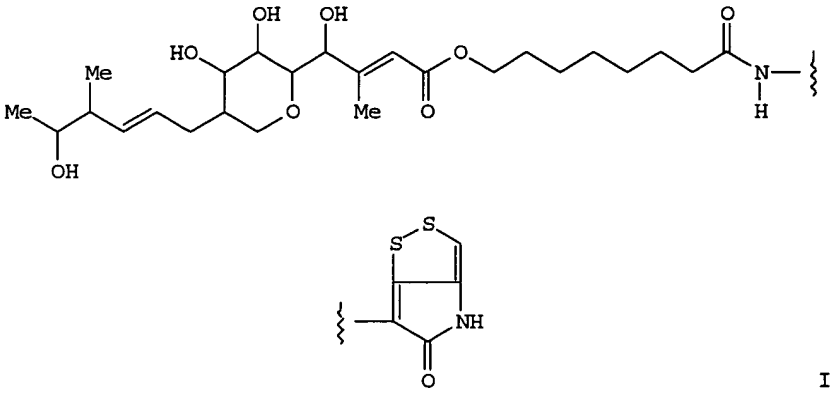


L39 ANSWER 16 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1993:167606 HCAPLUS
DN 118:167606
TI Antibiotic thiomarinol manufacture with Alteromonas
IN Takahashi, Shuji; Shiozawa, Hideyuki; Haruyama, Hideyuki; Kagasaki, Takeshi; Kodama, Kentaro; Ishii, Akira
PA Sankyo Co., Ltd., Japan
SO Eur. Pat. Appl., 13 pp.
CODEN: EPXXDW
DT **Patent**
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI EP----512824	A1	19921111	1992EP-0304105	19920507	<--
EP----512824	B1	19950913			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, PT, SE					
AU---9216033	A1	19921112	1992AU-0016033	19920505	<--
AU----646615	B2	19940224			
ZA---9203242	A	19930127	1992ZA-0003242	19920505	<--
IL----101786	A1	19950526	1992IL-0101786	19920505	<--
CA---2068083	AA	19921108	1992CA-2068083	19920506	<--
CA---2068083	C	20021112			
NO---9201783	A	19921109	1992NO-0001783	19920506	<--
NO----300736	B1	19970714			
JP--05132486	A2	19930528	1992JP-0112934	19920506	<--
JP---2766421	B2	19980618			
RU---2077534	C1	19970420	1992RU-5052114	19920506	<--
FI----100112	B1	19970930	1992FI-0002058	19920506	<--
CN---1067921	A	19930113	1992CN-0104386	19920507	<--
CN---1043786	B	19990623			
HU-----63197	A2	19930728	1992HU-0001526	19920507	<--
HU----214738	B	20000328			
CZ----279780	B6	19950614	1992CZ-0001392	19920507	<--
ES---2079797	T3	19960116	1992ES-0304105	19920507	<--
KR----139515	B1	19980601	1992KR-0007740	19920507	<--
US---5292892	A	19940308	1993US-0002085	19930108	<--

	US---5405762	A	19950411 1994US-0184225	19940119 <--
PRAI	1991JP-0101575	A	19910507 <--	
	1992US-0876500	B1	19920430 <--	
	1993US-0002085	A3	19930108 <--	

GI



I

AB Thiomarinol (I) having structure similarity with pseudomonic acid is manufactured by culturing A. rava. A. rava SANK73390 isolated from seawater was shaked-cultured in a medium containing Marine Broth (product of Difco) for 23 h at 23°. From 60-L culture broth, I 750 mg was purified by extraction and chromatog. The antibacterial and antimycoplasmal activities of I were given. Also given were the morphol. and physiol. characteristics of A. rava SANK73390 and physicochem. characteristics of I.

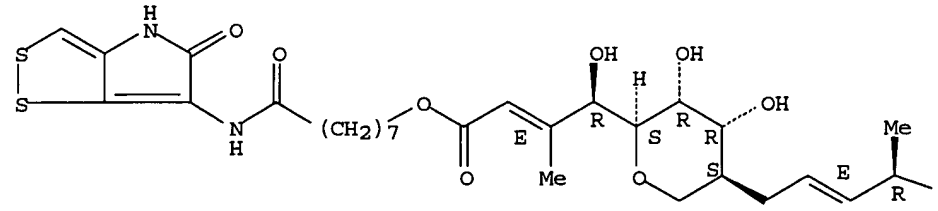
IT **146697-04-3P**
RL: BMF (Bioindustrial manufacture); BIOL (Biological study); PREP (Preparation)
(manufacture of, with Alteromonas rava)

RN 146697-04-3 HCAPLUS

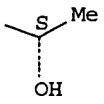
CN L-glycero-D-altro-Non-2-enonic acid, 5,9-anhydro-2,3,8-trideoxy-8-(5-hydroxy-4-methyl-2-hexenyl)-3-methyl-, 8-[(4,5-dihydro-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)amino]-8-oxooctyl ester, [2E,8(2E,4R,5S)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.

PAGE 1-A



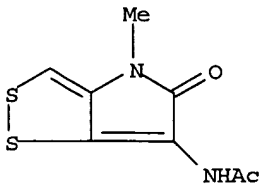
PAGE 1-B



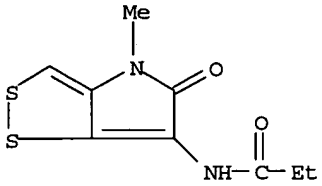
L39 ANSWER 17 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1986:454609 HCAPLUS
DN 105:54609
TI Pyrrothin derivatives as allergy inhibitors
IN Stahl, Peter; Seidel, Hans; Von der Eltz, Herbert; Wilhelms, Otto Henning; Roesch, Androniki
PA Boehringer Mannheim G.m.b.H., Fed. Rep. Ger.
SO Ger. Offen., 12 pp.
CODEN: GWXXBX
DT **Patent**
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE---3434562	A1	19860327	1984DE-3434562	19840920 <--
	WO---8601716	A2	19860327	1985WO-EP00489	19850919 <--
	W: JP, US				
	RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
	EP----196330	A1	19861008	1985EP-0905323	19850919 <--
	EP----196330	B1	19920701		
	R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
	JP--62500453	T2	19870226	1985JP-0504734	19850919 <--
	AT-----77744	E	19920715	1985AT-0905323	19850919 <--
	US---4760077	A	19880726	1986US-0874170	19860515 <--
PRAI	1984DE-3434562	A	19840920 <--		
	1985EP-0905323	A	19850919 <--		
	1985WO-EP00489	W	19850919 <--		

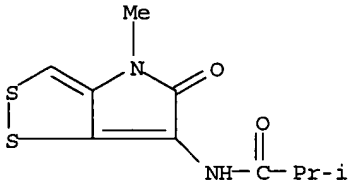
OS CASREACT 105:54609; MARPAT 105:54609
GI For diagram(s), see printed CA Issue.
AB Pyrrothin derivs. I (R, R1 = H, Me; R2 = H, Me, C1-5 acyl; X, Y = H, cation, or XY = linkage) inhibit allergen-induced degranulation of peripheral leukocytes. For example, isobutyrylpyrrothin, thiolutin, and aureothricin inhibited allergen-induced degranulation of mouse leukocytes by 50% in vitro at 1.7 + 10-6, 4 + 10-7, and 9 + 10-7 M, resp. These 3 compds. were obtained from culture filtrates of Streptoverticillium thioluteum DSM40027 and purified by extraction into EtOAc and chromatog. on silica gel. Thiolutin was converted by saponification and reduction to addnl. active compds.
IT **87-11-6 574-95-8 39859-18-2**
RL: BIOL (Biological study)
(allergy inhibition by)
RN 87-11-6 HCAPLUS
CN Acetamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)- (8CI, 9CI) (CA INDEX NAME)



RN 574-95-8 HCAPLUS
CN Propanamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)-
(9CI) (CA INDEX NAME)



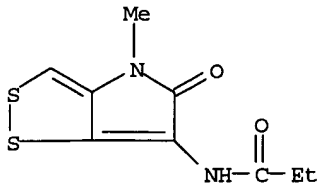
RN 39859-18-2 HCAPLUS
CN Propanamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)-
2-methyl- (9CI) (CA INDEX NAME)



L39 ANSWER 18 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1968:68029 HCAPLUS
DN 68:68029
TI Fungicide
PA Microbiochemical Research Foundation
SO Brit., 14 pp.
CODEN: BRXXAA
DT **Patent**
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB---1094567		19671213	1964GB-0048596	19641130 <--
	US---3856969		19741224	1965US-0436846	19650303 <--
PRAI	JP		19640623 <--		
	JP		19640626 <--		

AB One to three applications of 1.7 pints of 0.4% solution of kasugamycin (I) (from Streptomyces kasugaenis) per acre controls rice blast (Piricularia oryzae). Aureothricin, blasticidin S, phenylmercuric acetate and octadecyl thiocyanate act as synergists. I is more effective when applied after infection.
IT **574-95-8**
RL: BIOL (Biological study)
(synergist with kasugamycin in rice blast control)
RN 574-95-8 HCAPLUS
CN Propanamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)-
(9CI) (CA INDEX NAME)

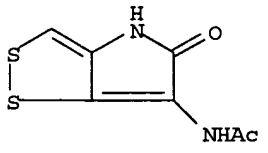


L39 ANSWER 19 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1963:11276 HCAPLUS
DN 58:11276
OREF 58:1886e-g
TI Holothin and its N-acyl derivatives
IN Gaeumann, Ernst; Prelog, Vladimir; Vischer, Ernst
PA CIBA Corp.
SO 7 pp.
DT **Patent**
LA Unavailable

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US---3014922		19611226	1959US-0828981	19590723 <--
PRAI CH		19580725 <--		

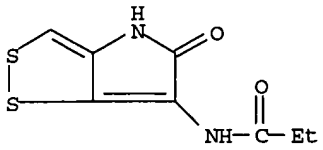
AB Holomycin (I) (CA 53, 14088g) was produced from the culture of a strain of Sireptomyces griseus on 1 l. of nutrient solution prepared from distillers' solubles 20, malt extract 20, NaNO3 1, and NaCl 5 g. at pH 7.5. Numerous other culture media also are described. The filter residue from the culture medium was extracted with acetone and added to the culture filtrate. The solution was extracted with EtOAc. The extract was washed with H2O, concentrated, and extracted with 0.5N HOAc and 2N NaOH. Crude I was obtained by evaporation of the EtOAc solution and purified by chromatography on Al2O3, to give orange-yellow flakes m. 264-71°. A solution of 500 mg. of I in 25 cc. of dioxane refluxed for 45 min. with 5 cc. concentrated HCl gave greenish-black crystalline holothin-HCl (II), m. up to 300°. A solution of 133 mg. of II in 13 cc. H2O was treated with 2 cc. of Ac2O to give I. Similarly were prepared the propionyl derivative, m. 250-60° (decompose), and the N-butyryl derivative, m. 215-18°. A solution of 206 mg. of I in 70 cc. EtOH refluxed for 2 hrs. with 2 g. Raney Ni gave colorless 3-acetamido-5-methyl-2-pyrrolidinone, m. 188-9°. Infrared and ultraviolet spectra are given. Halothin and its lower acyl derivs. and salts may be used as medicaments.

IT **488-04-0**, 1,2-Dithiolo[4,3-b]pyrrol-5(4H)-one, 6-acetamido-
(manufacture by Streptomyces griseus)
RN 488-04-0 HCAPLUS
CN Acetamide, N-(4,5-dihydro-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)- (8CI, 9CI) (CA INDEX NAME)

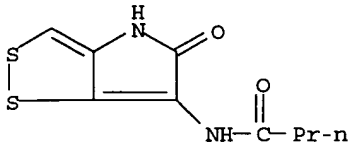


IT **4708-23-0**, Propionamide, N-(4,5-dihydro-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)- **92659-44-4**, Butyramide, N-(4,5-dihydro-5-oxo-1,2-dithiolo[4,3-b]-pyrrol-6-yl)-
(preparation of)
RN 4708-23-0 HCAPLUS
CN Propanamide, N-(4-,5-dihydro-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)- (9CI)

(CA INDEX NAME)



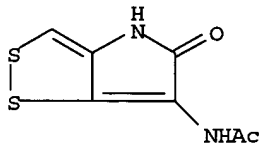
RN 92659-44-4 HCAPLUS
CN Butyramide, N-(4,5-dihydro-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)- (7CI)
(CA INDEX NAME)



L39 ANSWER 20 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1963:11275 HCAPLUS
DN 58:11275
OREF 58:1886c-e
TI Aspartocin
IN Shay, Anthony J.; Lowery, James A.; Bohanos, Nestor; Backus, Edward J.
PA American Cyanamid Co.
SO 8 pp.
DT **Patent**
LA Unavailable
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US---3057779		19621009	US	19600314 <--
PRAI US		19600314 <--		

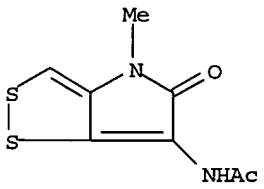
AB Streptomyces griseus var. spiralis and S. violaceus var. aspartocinicus are cultivated in an aqueous medium containing molasses 20, corn starch 10, bactopeptone 10, and CaCO3 1 g./l. at 28° for 24 to 240 hrs. with aeration and agitation to produce the antibiotic, aspartocin. The mycelium is removed from the culture broth by filtration at pH 5.0. Aspartocin is extracted from the mycelial cake with H2O at pH 1-2 and 9-10, and then back extracted into BuOH at pH 1-3. These BuOH exts. are adjusted to pH 5-6 and concentrated to 2-4% of their volume, causing the antibiotic to precipitate The addition of salts such as CaCl2 facilitate precipitation and (or) crystallization Aspartocin is composed of C 53.58, H 7.58, N 13.58, S 0.36, and O 24.90 parts by weight and contains L-aspartic acid, L-proline, L-valine, and glycine in 4:1:1:2 molar ratio. It is soluble in H2O, MeOH, EtOH, BuOH, AcOH, and slightly soluble in Me2CO, EtOAc, and Et2O. The antibiotic is active against gram-pos. bacteria and is used to render cotton cloth bacteriostatic and to promote growth in chickens and pigs.
IT **488-04-0**, 1,2-Dithiolo[4,3-b]pyrrol-5(4H)-one, 6-acetamido-
(manufacture by Streptomyces griseus)
RN 488-04-0 HCAPLUS
CN Acetamide, N-(4,5-dihydro-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)- (8CI, 9CI) (CA INDEX NAME)



L39 ANSWER 21 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1962:438173 HCAPLUS
DN 57:38173
OREF 57:7678i,7679a
TI Antibiotics as preservatives for industrial materials
IN Ross, Sidney H.; Teitell, Leonard
PA U.S. Dept. of the Army
SO 2 pp.
DT **Patent**
LA Unavailable
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US---3038819		19620612	1958US-0757167	19580825 <--
PRAI	US		19580825 <--		

AB The antibiotics tested, which had low skin-irritating properties to man, little or no deteriorating effect upon the products to which they were added, and reasonable amount of permanence, were endomycin, filipin, fungichromin, thiolutin, and rimocidin. A ≤ 2% solution was used. The antibiotics were tested by (1) determination of strength of paper impregnated with the antibiotics after being buried, (2) inhibition of fungal growth in castor oil, and (3) determining resistance to fungal growth of glue-bonded corks impregnated with the antibiotics.
IT **87-11-6**, 1,2-Dithiolo[4,3-b]pyrrol-5(4H)-one, 6-acetamido-4-methyl-
(in preservation of industrial materials)
RN 87-11-6 HCAPLUS
CN Acetamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)-
(8CI, 9CI) (CA INDEX NAME)



L39 ANSWER 22 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1957:83247 HCAPLUS
DN 51:83247
OREF 51:15062d-f
TI Inhibition of microbiological growth in beer
IN Bockelmann, John B.; Standskov, Frede B.
PA F. & M. Schaefer Brewing Co.
DT **Patent**
LA Unavailable
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US---2798811		19570709	1953US-0369959	19530723 <--

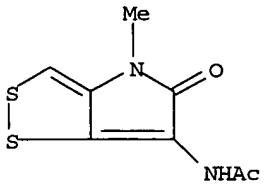
AB Antibiotics are added to finished beer to inhibit microbiol. spoilage. Addition of 5 γ/ml. thiolutin and either 5 γ/ml. penicillin or 5 γ/ml. polymyxin prevented the growth of bacteria and yeasts in

unpasteurized beer during 9 weeks incubation at 75°F. As little as 3 γ/ml. thiolutin plus 1 γ/ml. polymixin was effective. Yeasts and gram-pos. rods and cocci grew in unpasteurized beer containing 5 γ/ml. thiolutin alone or in combination with 5 γ/ml. bacitracin, subtilin, streptomycin, dihydrostreptomycin, or Terramycin. Gram-pos. bacteria but no yeast developed in beer containing 3 γ/ml. thiolutin and 0.3, 0.1, or 0.03 γ/ml. polymixin. Inhibition of growth of Lactobacillus pastorianus, Pediococcus damnosus, and secondary yeast in beer is specifically claimed.

IT **87-11-6**, 1,2-Dithiolo[4,3-b]pyrrol-5(4H)-one, 6-acetamido-4-methyl-
(microorganism control in beer with)

RN 87-11-6 HCAPLUS

CN Acetamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)-
(8CI, 9CI) (CA INDEX NAME)



L39 ANSWER 23 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1957:43547 HCAPLUS

DN 51:43547

OREF 51:8152i,8153a-b,8154a

TI Dioxopregnanespirothiazolidine

IN Fonken, Gunther S.; Hogg, John A.

PA Upjohn Co.

DT **Patent**

LA Unavailable

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US---2776967		19570108	1955US-0533236	19550908 <--

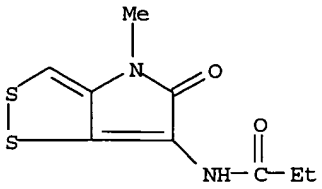
OS CASREACT 51:43547

AB Safe and effective H2O-soluble central nervous system depressants with prolonged pharmacodynamic effect are provided by 11,20-dioxo-5α(or β)-pregnane-3-spiro(2-thiazolidine-4-carboxylic acids) and their salts with a pharmacologically acceptable inorg. or organic cation. Cysteine HCl (4.39 g.) and 2.8 g. AcOK in 40 ml. H2O made up to 80 ml. with 95% alc., the solution stirred overnight with 9 g. 5β-pregnane-3,11,20-trione in 350 ml. 95% alc. at room temperature, refluxed 8 hrs. with stirring, kept overnight at room temperature, filtered, and the residue washed with H2O and dried at 50° in vacuo gave 7.3 g. 11,20-dioxo-5β-pregnane-3-spiro-(2-thiazolidine-4-carboxylic acid) (I), m. 155-60° (decomposition). I (7.3 g.) in 50 ml. H2O stirred with addition of about 140 ml. 0.1N NaOH to pH 8.1 (pH meter), the cloudy solution filtered through diatomaceous earth, and the filtrate lyophilized yielded 90% I Na salt. Similarly, 5α-pregnane-3,11,20-trione was converted to 11,20-dioxo-5α-pregnane-3-spiro-(2-thiazolidine-4-carboxylic acid) (II) and its Na salt. Possible basic amines suitable as organic cations for combination with I and II are listed.

IT **574-95-8**, Propionamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)-
(preparation of)

RN 574-95-8 HCAPLUS

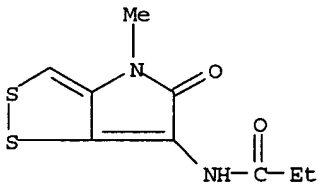
CN Propanamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)-
(9CI) (CA INDEX NAME)



L39 ANSWER 24 OF 24 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1957:9711 HCAPLUS
DN 51:9711
OREF 51:2084c-d
TI Antimicrobial agents
IN Celmer, Walter D.
PA Chas. Pfizer & Co., Inc.
DT **Patent**
LA Unavailable
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US---2752359		19560626	1952US-0313349	19521006 <--

AB Acetopyrrothine (I) (C.A. 48, 14133c) is hydrolyzed by a strong inorg. acid in a 2-phase organic solvent-aqueous system. I in dioxane refluxed with concentrated HCl 0.5 hr., filtered, dried, recrystd., and further purified yields pyrrothine-HCl-H2O (II), pKa 2.9, λ 226,309,381 mμ. II further treated with NH3 in HCCl3, filtered, precipitated with hexane, filtered off, and dried gave the free base. Propionopyrrothine and I are prepared from II and EtCOCl or AcCl in CHCl3.
IT **574-95-8**, Propionamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)-
(preparation of)
RN 574-95-8 HCAPLUS
CN Propanamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)- (9CI) (CA INDEX NAME)



=> b hcao
FILE 'HCAOLD' ENTERED AT 10:33:29 ON 27 SEP 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

PRE-1967 CHEMICAL ABSTRACTS FILE WITH HOUR-BASED PRICING
FILE COVERS 1907-1966
FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file supports REG1stRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

=> d all l40 tot

L40 ANSWER 1 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA65:20520g CAOLD
TI field evaluation of antibiotics and chemicals for control of oak wilt in northern pin oaks
AU Phelps, William R.; Kuntz, J. E.; Ross, A.
IT 83-28-3 86-75-9 **87-11-6** 87-51-4 88-89-1
123-31-9 126-07-8 142-59-6 298-39-5 480-49-9 536-69-6
548-62-9 569-64-2 581-96-4 1393-88-0 1404-22-4 1404-88-2
1508-62-9 2322-08-9 3182-79-4 3428-71-5 4135-11-9 4696-62-2
6436-90-4 7091-57-8 11016-19-6 13038-52-3 15399-01-6 15902-69-9
22862-76-6

L40 ANSWER 2 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA65:5910b CAOLD
TI effect of antibiotics on growth of Mycoplasma pneumoniae
AU Arai, Sumio; Yoshida, K.; Izawa, A.; Kumagai, K.; Ishida, N.
IT **574-95-8** 1695-77-8 11017-43-9 17650-86-1 19721-56-3
24751-69-7

L40 ANSWER 3 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA65:3668c CAOLD
TI classification and identification of antifungal antibiotics by chromatographic spectra
AU Khokhlova, Yu. M.; Puchnina, A. V.; Oparysheva, E. F.; Golovkina, L. M.; Blinov, N. O.
IT 67-99-2 126-07-8 141-35-5 478-05-7 480-49-9 481-39-0
483-60-3 522-70-3 **574-95-8** 606-58-6 1218-74-2
1362-89-6 1405-90-9 1438-30-8 3306-52-3 3459-16-3 5822-34-4
6833-84-7 7182-54-9 7561-71-9 11013-29-9 13058-67-8 20261-85-2
20350-15-6 54003-27-9

L40 ANSWER 4 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA64:6632g CAOLD
TI reaction of butyramidine with epoxides-preparation of 2-propyl-2-oxazolines
AU Lambert, Rogers F.; Kristofferson, C. E.
IT 107-90-4 3020-81-3 **4694-77-3** **4694-78-4**
4694-80-8 4694-81-9 4694-83-1 4694-85-3 4694-86-4 4694-87-5
4743-03-7 6076-95-5 90204-36-7

L40 ANSWER 5 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA64:6632e CAOLD
TI synthetic thiolution analogs
AU Bhate, Dattatraya S.; Sambray, Y. M.
IT 4694-74-0 **4694-75-1** **4694-76-2** 5002-87-9
13366-07-9

L40 ANSWER 6 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA64:2451h CAOLD
TI biotransformation of thiolutin production from Streptomyces pimprina to S. aureofaciens
AU Ramachandran, Suryanarayan; Sukapure, R. S.; Thirumalachar, M. J.
IT **87-11-6**

L40 ANSWER 7 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA63:3359f CAOLD
TI antibiotic inhibition of algal growth
AU Perlman, David

IT 67-99-2 **87-11-6** 125-65-5 126-07-8 127-33-3
303-81-1 480-49-9 483-60-3 490-02-8 497-72-3 518-75-2
1086-03-9 1121-30-8 6377-18-0 13058-67-8 17650-86-1 20283-48-1
31282-04-9

L40 ANSWER 8 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA62:5261d CAOLD
TI synthesis of holomycin
AU Buechi, George; Lukas, G.
IT **488-04-0** 701-14-4 703-25-3 708-22-5 731-56-6
731-57-7 735-18-2 735-91-1 735-92-2 735-93-3 737-33-7
737-93-9 746-17-8 746-18-9 746-19-0 746-20-3 746-21-4
747-57-9 747-63-7 748-98-1 750-06-1 889-39-4 981-26-0
983-03-9 3473-27-6 92248-75-4

L40 ANSWER 9 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA61:8857d CAOLD
TI identification by x-ray powder diffraction of thiolutin and aureothricin isolated by paper chromatography
AU Martin, John Henry; Groth, W. C.; Hausmann, W. K.
IT **87-11-6** **574-95-8**

L40 ANSWER 10 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA61:3084f CAOLD
TI total synthesis of the antibiotics, thiolutin and holomycin - (II) introduction of mercapto groups into pyrrolones
AU Schmidt, Ulrich
IT **87-11-6** **488-04-0** 5202-78-8

L40 ANSWER 11 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA60:14853f CAOLD
TI biosynthesis of thiolutin
AU Brink, Robert H., Jr.
IT **87-11-6**

L40 ANSWER 12 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA60:1539c CAOLD
TI application of thin-layer chromatography for separation and identification of antibiotics
AU Ikekawa, Tetsuro; Iwami, F.; Akita, E.; Umezawa, H.
IT **87-11-6** 299-20-7 522-70-3 539-35-5
574-95-8 1404-80-4 3552-16-7 6379-56-2 6834-98-6
12656-40-5 19721-56-3 54003-27-9

L40 ANSWER 13 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA59:6374h CAOLD
TI total synthesis of the antibiotics thiolutin and holomycin
AU Schmidt, Ulrich; Geiger, F.
IT **87-11-6** **488-04-0** 17771-36-7 17771-37-8
17771-38-9 17958-78-0 40647-81-2 40970-25-0 40970-28-3 40970-29-4
61040-21-9 82031-42-3 86247-90-7 89531-66-8 89896-91-3 90345-39-4
90438-00-9 90612-05-8 90770-46-0 91013-69-3 91558-95-1 91807-18-0
92369-67-0 92576-32-4 92851-68-8 93041-65-7 93139-36-7 93262-81-8
93427-67-9 93689-26-0 94000-31-4 94488-37-6 94501-89-0 94584-10-8
95591-82-5 95875-90-4 95937-27-2 96775-79-0 96792-79-9 96951-63-2
97236-85-6 97525-12-7 97525-48-9 98000-64-7 98529-76-1 100152-96-3
106599-90-0

L40 ANSWER 14 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA58:10185a CAOLD
TI synthesis of holomycin
AU Buechi, George; Lukas, G.
IT **488-04-0** 731-57-7 735-92-2 735-93-3 748-04-9
750-06-1 92248-75-4

L40 ANSWER 15 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN

AN CA58:4836f CAOLD
TI disk testing of drugs against planted Trichomonas vaginalis
AU Samuels, Robert; Stouder, D. J.
IT 72-80-0 79-90-3 **87-11-6** 140-40-9 140-63-6
483-57-8 523-86-4 908-54-3 1122-04-9 2948-69-8 3034-42-2
3063-72-7 3697-42-5 3810-35-3 4214-76-0 6834-98-6 16243-72-4
21478-97-7 51419-40-0 64724-83-0 95874-78-5 102218-77-9 106215-85-4

L40 ANSWER 16 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA58:1886e CAOLD
TI holothin and its N-acyl derivs.
AU Gaeumann, Ernst; Prelog, V.; Vischer, E.
PA CIBA Corp.
DT Patent

PATENT NO.	KIND	DATE
US---3014922		1961

IT 488-03-9 **488-04-0** **4708-23-0** 90993-81-0
91912-34-4 **92659-44-4**

L40 ANSWER 17 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA57:15607f CAOLD
TI inhibition by antibiotics of the growth of bacterial and yeast protoplasts
AU Shockman, Gerald D.; Lampen, J. O.
IT **87-11-6** 534-76-9 738-72-7 2504-55-4

L40 ANSWER 18 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA57:11180f CAOLD
TI total synthesis of the antibiotics thiolutin, aureothricin, and holomycin
AU Schmidt, Ulrich; Geiger, F.
IT **87-11-6** **488-04-0** **574-95-8**

L40 ANSWER 19 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA57:7678i CAOLD
TI antibiotics as preservatives for industrial materials
AU Ross, Sidney H.; Teitell, L.
PA United States Dept. of the Army
DT Patent
TI fungicide
AU Boogaart, Krijn van den
DT Patent
IT **87-11-6** 5822-83-3 6834-98-6 93262-47-6 94215-21-1
95594-24-4 96677-92-8 97620-07-0 98905-45-4 101474-14-0 101675-85-8
106065-95-6

L40 ANSWER 20 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA57:5254f CAOLD
TI application of nonionic surface-active agents to the antibacterial test
AU Watanabe, Hiroshi; Otani, S.; Uehara, T.; Uehara, R.
IT **574-95-8**

L40 ANSWER 21 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA56:5208c CAOLD
TI sensitivity of Schizophyllum commune to chemical toxicants
AU Parag, Yair
IT 67-99-2 **87-11-6** 483-60-3 21802-37-9 106172-27-4

L40 ANSWER 22 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA55:27768a CAOLD
TI holomycin
AU Gaeumann, Ernst; Prelog, V.; Vischer, E.
PA CIBA Ltd.
DT Patent

PATENT NO.	KIND	DATE
DE---1085297		

IT **488-04-0**

L40 ANSWER 23 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA55:14796i CAOLD
TI antibiotics as seed protectants
AU Kruger, W.
IT **87-11-6** 3428-71-5 15399-01-6 15902-69-9 22862-76-6

L40 ANSWER 24 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA55:11532f CAOLD
TI enzymic metabolism of Streptomyces griseus - (III) phosphatasic activity, (IV) lipasic activity
AU Otero Abalo, Ramon; Regueiro Varela, B.
IT **87-11-6**

L40 ANSWER 25 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA55:11532e CAOLD
TI isolation of isobutyropyrrothine along with thiolutin and Aureothricin from a Streptomyces spp.
AU Bhate, D. S.; Hulyalkar, R. K.; Menon, S. K.
IT **574-95-8** **39859-18-2**

L40 ANSWER 26 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA55:1787g CAOLD
TI antibiotic sensitivity of Leptospira as measured by loss of motility
AU Goldberg, Herbert S.; Logue, J. T.
IT **87-11-6**

L40 ANSWER 27 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA55:679f CAOLD
TI antibiotics - (V) simultaneous production of aureothricin and thiolutin by Streptomyces spp.
AU Nakamura, Michikazu; Terao, M.; Akabori, H.
IT **87-11-6** **574-95-8**

L40 ANSWER 28 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA54:25543h CAOLD
TI pesticidal P esters
AU Willard, Joe R.; Henahan, J. F.
DT Patent
TI β-hydroxyethyl-N-β-hydroxyethylcarbazinate and its use in promoting flowering of pineapple plants
PA Olin Mathieson Chemical Corp.
DT Patent

PATENT NO.	KIND	DATE
GB----839734		

IT **87-11-6**

L40 ANSWER 29 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA54:15563f CAOLD
TI influence of Mg, K, and N nutrition on phosphoenolpyruvate-stimulated CO2 fixation
AU Thomas, Grant W.; Coleman, N. T.; Jackson, W. A.
IT **87-11-6** **115-02-6**

L40 ANSWER 30 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA54:13268a CAOLD
TI antibiotics against plant disease - (VI) determining the effects of chems. on germination of bean-rust uredospores
AU Pridham, Thomas G.; Sharpe, E. S.; Kemp, C. E.
IT **87-11-6**

L40 ANSWER 31 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA53:22462g CAOLD
TI snake venom from Trimeresurus flavoviridis - (I) nature of the venom and

the therapy
AU Mihashi, Susumu; Ogonoki, T.; Sawai, Y.
IT **574-95-8**

L40 ANSWER 32 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA53:14088g CAOLD
TI metabolic products from actinomycetes - (XVII) holomycin
AU Ettlinger, Leopold; Gauemann, E.; Huetter, R.; Keller-Schierlein, W.; Kradolfer, F.; Neipp, L.; Prelog, V.; Zaehner, H.
IT **87-11-6** 488-03-9 **488-04-0** **574-95-8**
4708-23-0 82518-90-9 90993-81-0 91912-34-4 98428-71-8
98594-00-4 100611-25-4 100911-41-9 **112843-01-3**

L40 ANSWER 33 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA53:12390g CAOLD
TI determination of a mixture of thiolutin and aureothricin by infrared spectrophotometry
AU Ito, Akira; Amakasu, O.
IT **87-11-6** **574-95-8**

L40 ANSWER 34 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA53:7313d CAOLD
TI antibiotic substances - (IV) crystalline toxic substance of Streptomyces thioluteus producing aureothricin
AU Maeda, Kenji
IT **574-95-8**

L40 ANSWER 35 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA53:7313a CAOLD
TI yellow crystalline antibiotic, identical with aureothricin, isolated from a new species of Streptomyces 39a-taxonomic study
AU Nishimura, Haruo; Kimura, T.; Kuroya, M.
IT **574-95-8**

L40 ANSWER 36 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA52:13087c CAOLD
TI effects of actinomycetes products on the culture of human carcinoma cells - (I) effect of antibiotics having no or slight tumor-inhibitory activity on HeLa cells, (II) of antitumor antibiotics on HeLa cells
AU Nitta, Kazuo
IT **574-95-8** 1397-95-1 2072-68-6

L40 ANSWER 37 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA52:12299b CAOLD
TI effects of an C2H4 chloride and trichloroethane mixture on 3 citrus-fruit pathogens
AU Berry, S. Z.
IT **87-11-6** 534-76-9

L40 ANSWER 38 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA52:637i CAOLD
TI control of downy mildew of broccoli with antibiotics and fungicides
AU Natti, John J.
IT **87-11-6** 6834-98-6 22862-76-6

L40 ANSWER 39 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA51:15860c CAOLD
TI fertilizer
AU Kurinishi, Kiyoshi; et al.
PA Nissan Chemical Industries, Ltd.
DT Patent

PATENT NO.	KIND	DATE
JP--55005265		1955

IT **87-11-6** 101-21-3 101-99-5 122-42-9 3696-28-4
3811-73-2 5416-67-1 5416-68-2 6834-98-6 7399-80-6 7495-80-9

14915-37-8 32255-90-6 73622-98-7 90206-63-6 99359-86-1 100116-75-4
101878-32-4 102076-61-9 102702-25-0 106320-92-7 106596-17-2 107520-53-6
112352-60-0 113224-02-5

L40 ANSWER 40 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA51:15062d CAOLD
TI inhibition of microbiol. growth in beer
AU Bockelmann, John B.; Strandskon, F. B.
PA Schaefer, F. & M., Brewing Co.
DT Patent

PATENT NO.	KIND	DATE
SU----105592		
US---2798811		1957

IT **87-11-6**

L40 ANSWER 41 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA51:9814d CAOLD
TI photosynthetic reaction - (III) effects of various inhibitors on growth and carbonate-fixation in Chlorella pyrenoidosa
AU Tomisek, Arthur J.; Reid, M. R.; Short, W. A.; Skipper, H. E.
IT 67-99-2 **87-11-6** 107-36-8 115-02-6 539-35-5
611-08-5 4378-70-5 10296-76-1 114281-92-4

L40 ANSWER 42 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA51:9701e CAOLD
TI N-acyl derivs. of deacetylthiolutin
PA Pfizer, Chas., & Co., Inc.
DT Patent
TI resolution of N-acyl-DL-tryptophans
PA U C L A F
DT Patent

PATENT NO.	KIND	DATE
GB----745097		
GB----755968		

IT 5002-87-9 14172-52-2 16108-03-5 **109478-45-7**
109504-07-6 112841-90-4 116082-76-9

L40 ANSWER 43 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA51:8154a CAOLD
TI antimicrobial agents
PA Pfizer, Chas., & Co., Inc.
DT Patent
TI hydrocortisone 21-tert-butylacetate
PA Merck & Co., Inc.
DT Patent

PATENT NO.	KIND	DATE
GB----753331		
GB----765505		

IT 508-96-3 **574-95-8** 642-77-3

L40 ANSWER 44 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA51:3080i CAOLD
TI deratting procedures and anticoagulants
AU Hachet, M. P.
IT 81-82-3 **87-11-6** 94-18-8 99-11-6 483-55-6
548-00-5 4195-02-2 4767-00-4 67554-50-1

L40 ANSWER 45 OF 45 HCAOLD COPYRIGHT 2006 ACS on STN
AN CA51:2084c CAOLD
TI antimicrobial agents
AU Celmer, Walter D.
PA Pfizer, Chas., & Co., Inc.
DT Patent

	PATENT NO.	KIND	DATE
PI	US---2752359		1956
IT	574-95-8	642-77-3	4682-70-6

=> b reg
FILE 'REGISTRY' ENTERED AT 10:33:46 ON 27 SEP 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 26 SEP 2006 HIGHEST RN 908803-03-2
DICTIONARY FILE UPDATES: 26 SEP 2006 HIGHEST RN 908803-03-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

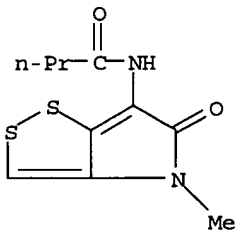
Please note that search-term pricing does apply when
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=> d ide can l41 tot

L41 ANSWER 1 OF 15 REGISTRY COPYRIGHT 2006 ACS on STN
RN 112843-01-3 REGISTRY
ED Entered STN: 13 Feb 1988
CN Butanamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)-
(9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Butyramide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)-
(6CI)
MF C10 H12 N2 O2 S2
SR CAOLD
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5 REFERENCES IN FILE CA (1907 TO DATE)
5 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 145:270098

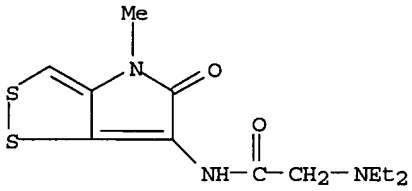
REFERENCE 2: 138:88690

REFERENCE 3: 138:86345

REFERENCE 4: 123:193172

REFERENCE 5: 53:77769

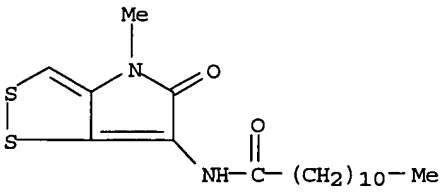
L41 ANSWER 2 OF 15 REGISTRY COPYRIGHT 2006 ACS on STN
RN **112841-90-4** REGISTRY
ED Entered STN: 13 Feb 1988
CN 1,2-Dithiolo[4,3-b]pyrrol-5(4H)-one, 6-(2-diethylaminoacetamido)-4-methyl-(6CI) (CA INDEX NAME)
MF C12 H17 N3 O2 S2
SR CAOLD
LC STN Files: CAOLD



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L41 ANSWER 3 OF 15 REGISTRY COPYRIGHT 2006 ACS on STN
RN **109504-07-6** REGISTRY
ED Entered STN: 01 Aug 1987
CN Dodecanamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)- (6CI) (CA INDEX NAME)
MF C18 H28 N2 O2 S2
SR CAOLD
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

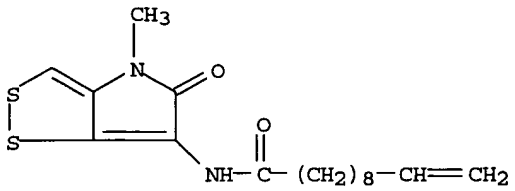
2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 51:52108

REFERENCE 2: 51:52107

L41 ANSWER 4 OF 15 REGISTRY COPYRIGHT 2006 ACS on STN

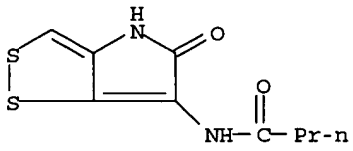
RN **109478-45-7** REGISTRY
ED Entered STN: 25 Jul 1987
CN 10-Undecenamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)- (6CI) (CA INDEX NAME)
MF C17 H24 N2 O2 S2
SR CAOLD
LC STN Files: CAOLD



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L41 ANSWER 5 OF 15 REGISTRY COPYRIGHT 2006 ACS on STN
RN **92659-44-4** REGISTRY
ED Entered STN: 17 Dec 1984
CN Butyramide, N-(4,5-dihydro-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)- (7CI) (CA INDEX NAME)
MF C9 H10 N2 O2 S2
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS
(*File contains numerically searchable property data)



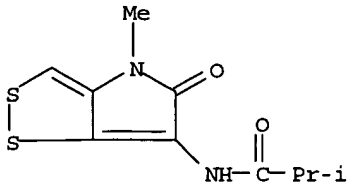
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 58:11276

REFERENCE 2: 53:77769

L41 ANSWER 6 OF 15 REGISTRY COPYRIGHT 2006 ACS on STN
RN **39859-18-2** REGISTRY
ED Entered STN: 16 Nov 1984
CN Propanamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)-2-methyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1,2-Dithiolo[4,3-b]pyrrole, propanamide deriv.
CN Propionamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)-2-methyl- (6CI)
MF C10 H12 N2 O2 S2
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, USPATFULL
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

8 REFERENCES IN FILE CA (1907 TO DATE)
8 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 145:270098

REFERENCE 2: 138:88690

REFERENCE 3: 138:86345

REFERENCE 4: 118:22076

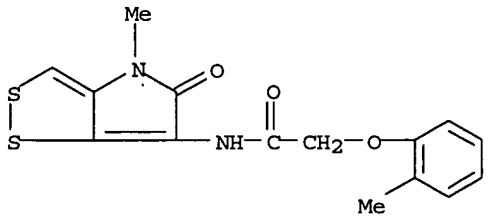
REFERENCE 5: 105:54609

REFERENCE 6: 94:97054

REFERENCE 7: 78:57238

REFERENCE 8: 55:59998

L41 ANSWER 7 OF 15 REGISTRY COPYRIGHT 2006 ACS on STN
RN **4743-03-7** REGISTRY
ED Entered STN: 16 Nov 1984
CN 1,2-Dithiolo[4,3-b]pyrrol-5(4H)-one, 4-methyl-6-[2-(o-tolyloxy)acetamido]- (7CI, 8CI) (CA INDEX NAME)
MF C15 H14 N2 O3 S2
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, TOXCENTER
(*File contains numerically searchable property data)



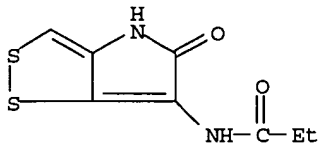
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 64:35826

L41 ANSWER 8 OF 15 REGISTRY COPYRIGHT 2006 ACS on STN
RN **4708-23-0** REGISTRY
ED Entered STN: 16 Nov 1984
CN Propanamide, N-(4-,5-dihydro-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)- (9CI)

(CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1,2-Dithiolo[4,3-b]pyrrole, propanamide deriv.
CN Propionamide, N-(4,5-dihydro-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)- (6CI, 7CI, 8CI)
MF C8 H8 N2 O2 S2
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

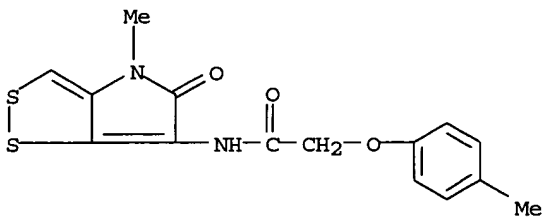
3 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 87:3961

REFERENCE 2: 58:11276

REFERENCE 3: 53:77769

L41 ANSWER 9 OF 15 REGISTRY COPYRIGHT 2006 ACS on STN
RN **4694-78-4** REGISTRY
ED Entered STN: 16 Nov 1984
CN Acetamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)-2-(4-methylphenoxy)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1,2-Dithiolo[4,3-b]pyrrol-5(4H)-one, 4-methyl-6-[2-(p-tolyloxy)acetamido]- (7CI)
CN 1,2-Dithiolo[4,3-b]pyrrole, acetamide deriv.
MF C15 H14 N2 O3 S2
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, TOXCENTER
(*File contains numerically searchable property data)



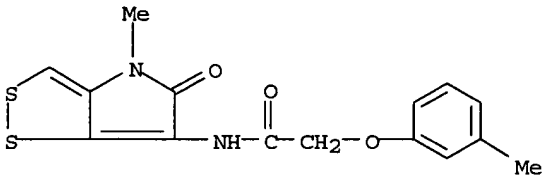
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 64:35826

L41 ANSWER 10 OF 15 REGISTRY COPYRIGHT 2006 ACS on STN

RN **4694-77-3** REGISTRY
ED Entered STN: 16 Nov 1984
CN Acetamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)-2-(3-methylphenoxy)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1,2-Dithiolo[4,3-b]pyrrol-5(4H)-one, 4-methyl-6-[2-(m-tolyloxy)acetamido]- (7CI)
CN 1,2-Dithiolo[4,3-b]pyrrole, acetamide deriv.
MF C15 H14 N2 O3 S2
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, TOXCENTER
(*File contains numerically searchable property data)

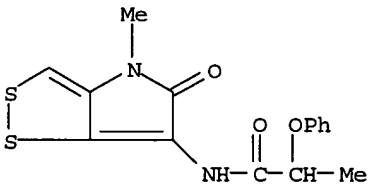


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 64:35826

L41 ANSWER 11 OF 15 REGISTRY COPYRIGHT 2006 ACS on STN
RN **4694-76-2** REGISTRY
ED Entered STN: 16 Nov 1984
CN Propionamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)-2-phenoxy- (7CI, 8CI) (CA INDEX NAME)
MF C15 H14 N2 O3 S2
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, TOXCENTER
(*File contains numerically searchable property data)



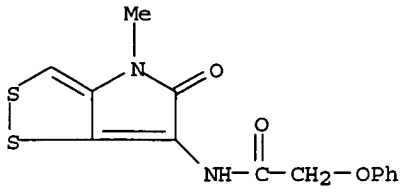
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 64:35826

L41 ANSWER 12 OF 15 REGISTRY COPYRIGHT 2006 ACS on STN
RN **4694-75-1** REGISTRY
ED Entered STN: 16 Nov 1984
CN Acetamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)-2-phenoxy- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1,2-Dithiolo[4,3-b]pyrrol-5(4H)-one, 4-methyl-6-(2-phenoxyacetamido)-

(7CI)
CN 1,2-Dithiolo[4,3-b]pyrrole, acetamide deriv.
MF C14 H12 N2 O3 S2
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, TOXCENTER
(*File contains numerically searchable property data)

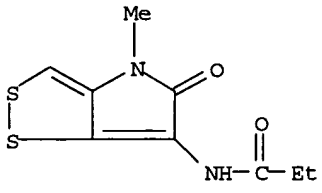


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 64:35826

L41 ANSWER 13 OF 15 REGISTRY COPYRIGHT 2006 ACS on STN
RN **574-95-8** REGISTRY
ED Entered STN: 16 Nov 1984
CN Propanamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)-
(9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1,2-Dithiolo[4,3-b]pyrrole, propanamide deriv.
CN Propionamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)- (6CI, 7CI, 8CI)
OTHER NAMES:
CN 5-Methyl-3-propionamidopyrrolin-4-one-[4,3-d]-1,2-dithiole
CN Aureothricin
MF C9 H10 N2 O2 S2
LC STN Files: AGRICOLA, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, DDFU, DRUGU, EMBASE, MEDLINE, MRCK*, NAPRALERT, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

52 REFERENCES IN FILE CA (1907 TO DATE)
52 REFERENCES IN FILE CAPLUS (1907 TO DATE)
16 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 143:307

REFERENCE 2: 136:256811

REFERENCE 3: 118:22076

REFERENCE 4: 114:58626

REFERENCE 5: 114:38974

REFERENCE 6: 109:190434

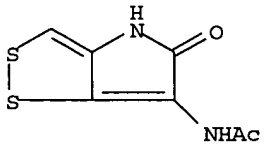
REFERENCE 7: 109:291

REFERENCE 8: 108:142509

REFERENCE 9: 106:116224

REFERENCE 10: 105:54609

L41 ANSWER 14 OF 15 REGISTRY COPYRIGHT 2006 ACS on STN
RN 488-04-0 REGISTRY
ED Entered STN: 16 Nov 1984
CN Acetamide, N-(4,5-dihydro-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)- (8CI, 9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1,2-Dithiolo[4,3-b]pyrrol-5(4H)-one, 6-acetamido- (6CI, 7CI)
CN 1,2-Dithiolo[4,3-b]pyrrole, acetamide deriv.
OTHER NAMES:
CN 1,2-Dithiolo[4,3-b]pyrrol-5(4H)-one, 6-(acetylamino)-
CN Holomycin
CN N-(4,5-Dihydro-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)acetamide
MF C7 H6 N2 O2 S2
LC STN Files: AGRICOLA, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, DDFU, DRUGU, EMBASE, MEDLINE, MRCK*, NAPRALERT, RTECS*, TOXCENTER
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

21 REFERENCES IN FILE CA (1907 TO DATE)
21 REFERENCES IN FILE CAPLUS (1907 TO DATE)
9 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 144:205230

REFERENCE 2: 143:307

REFERENCE 3: 138:253753

REFERENCE 4: 134:219584

REFERENCE 5: 134:53745

REFERENCE 6: 118:22076

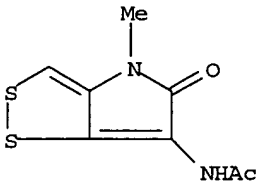
REFERENCE 7: 91:71451

REFERENCE 8: 87:117801

REFERENCE 9: 87:3961

REFERENCE 10: 81:152065

L41 ANSWER 15 OF 15 REGISTRY COPYRIGHT 2006 ACS on STN
RN 87-11-6 REGISTRY
ED Entered STN: 16 Nov 1984
CN Acetamide, N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)-
(8CI, 9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1,2-Dithiolo[4,3-b]pyrrol-5(4H)-one, 6-acetamido-4-methyl- (6CI, 7CI)
CN 1,2-Dithiolo[4,3-b]pyrrole, acetamide deriv.
OTHER NAMES:
CN 3-Acetamido-5-methylpyrrolin-4-one[4,3-d]-1,2-dithiole
CN Acetopyrrothin
CN N-(4,5-Dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)acetamide
CN NSC 3927
CN Thiolutin
MF C8 H8 N2 O2 S2
LC STN Files: AGRICOLA, AQUIRE, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAOLD,
CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CSCHEM, DDFU, DRUGU, EMBASE,
MEDLINE, MRCK*, NAPRALERT, RTECS*, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

120 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
120 REFERENCES IN FILE CAPLUS (1907 TO DATE)
28 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 145:270098

REFERENCE 2: 143:307

REFERENCE 3: 142:32916

REFERENCE 4: 141:83491

REFERENCE 5: 140:350028

REFERENCE 6: 138:88690

REFERENCE 7: 138:86345

REFERENCE 8: 136:256811

REFERENCE 9: 134:53745

REFERENCE 10: 132:93329

=> d his

(FILE 'HOME' ENTERED AT 09:32:29 ON 27 SEP 2006)

FILE 'HCAPLUS' ENTERED AT 09:33:10 ON 27 SEP 2006

```
L1            1 US2006074125/PN OR (US2005-509074 OR WO2003-CA380 OR US2002-418

     FILE 'REGISTRY' ENTERED AT 09:34:51 ON 27 SEP 2006

     FILE 'HCAPLUS' ENTERED AT 09:34:51 ON 27 SEP 2006
L2              TRA L1 1- RN :      172 TERMS

     FILE 'REGISTRY' ENTERED AT 09:34:51 ON 27 SEP 2006
L3            172 SEA L2
L4              1 C26H27N3O3S2 AND L3
L5             74 S2C3-NC4/ES AND L3
L6                STR
L7             13 L6
L8            215 L6 FULL
                  SAV TEM L8 QAZ074F0/A
L9             51 L8 AND L3
L10               STR L6
L11               STR L10
L12               STR L11
L13             2 L10-12 SAM SUB=L8
L14             0 L10-12 SAM CSS SUB=L8
L15             3 L10-12 CSS FULL SUB=L8
L16           212 L8 NOT L15

     FILE 'HCAPLUS' ENTERED AT 10:21:52 ON 27 SEP 2006
L17           189 L16
                  E CHEN G/AU
L18          1185 E3,E15-16
                  E CHEN GEN/AU
L19             7 E3
                  E CHEN GENHUI/AU
L20            22 E3
                  E LI J/AU
L21          4638 E3-44
                  E LI JIAN/AU
L22          1610 E3,E108
                  E LI JIANXIONG/AU
L23            77 E3
                  E WEBSTER J/AU
L24           335 E3-29
                  E WEBSTER JOHN/AU
L25           189 E3-25
                  E LI B/AU
L26           873 E3-28
                  E LI BIN/AU
L27          1344 E3-23
L28             4 L17 AND L1,L18-27
L29           185 L17 NOT L28
L30           180 L29 AND (PY<=2002 OR AY<=2002 OR PRY<=2002)
L31           180 L29 AND (PD<=20020326 OR AD<=20020326 OR PRD<=20020326)
L32           180 L30-31
L33            35 L32 AND P/DT
L34            12 L33 AND US/PC
L35            12 L33 AND US/AC,PRC
L36            12 L34-35
L37           145 L32 NOT L33
                  SEL AN 1-12
L38            12 E1-24 AND L37

     FILE 'REGISTRY' ENTERED AT 10:29:29 ON 27 SEP 2006
                  SAV TEM L15 QAZ074F1/A
                  SAV TEM L16 QAZ074F2/A

     FILE 'HCAPLUS' ENTERED AT 10:29:57 ON 27 SEP 2006
L39            24 L36,L38
```

```
     FILE 'HCAOLD' ENTERED AT 10:30:08 ON 27 SEP 2006
L40           45 L16
                 SEL HIT RN

     FILE 'REGISTRY' ENTERED AT 10:30:49 ON 27 SEP 2006
L41           15 E25-39

=>
```